1994

Relationships Among Selected Internal/External Variables Affecting Decision Making in the Roles/Functions of Research University Provosts

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Order Number 9502650

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Andrews University, 1994

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A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Haldane F. Davies II

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ABSTRACT

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ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

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Title: RELATIONSHIPS AMONG SELECTED INTERNAL/EXTERNAL VARIABLES AFFECTING DECISION MAKING IN THE ROLES/FUNCTIONS OF RESEARCH UNIVERSITY PROVOSTS

Name of researcher: Haldane F. Davies II

Name and degree of faculty chair: Bernard M. Lall, Ph.D.

Date completed: August 1994

Problem

In the business and corporate world, there exists a unique collection of proven decision-making tools, techniques, and management ideas. There is, however, no clear definition and empirical analysis relative to the nature of the relationships among internal/external variables as they influence decision-making in the research university provosts' roles and functions. It was the purpose of this study to investigate the effects of selected variables on provost decision-making within their many functions.

Method

The survey research method was used to study the relationships among selected variables affecting decision-making in the functions of research university provosts. An instrument was designed and pilot tested for the purpose of this study. The goal of the instrument was to measure how provosts perceived nine variables as being important to decision-making in each of 11 functions. A demographic information questionnaire was also used for data collection. Statistical procedures included Pearson's Product-Moment Correlation Coefficient, Repeated Measures Analysis of Variance, and Multivariate Analysis of Variance.

Results

Results obtained are as follows:

1. There were significant relationships among of the nine variables with respect to the functions. The three variables with the highest number of significant correlations were experiences gained on the job, philosophy of administration, and needs of the university community.

2. Job experience, philosophy of administration, and needs of the university community were significantly different from and more important than all other variables.

3. Responses of the provosts with respect to the importance of the variables did not differ regardless of their field of study and age.

Conclusion

This study revealed that some variables were significantly more important than others. Unlike formal preparation which had little to do with effective provost decision-making job experience was an important variable upon which provosts relied in making tough decisions. Provosts are expected to "plunge in," apply their philosophy and learn by experience.

To my wife Janice and our son Haldane III

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ACKNOWLEDGEMENTS

No research of this magnitude could be humanly possible without the guidance of God and the positive influence of many learned, astute, and knowledgeable persons.

No list of appreciation could be complete without expressing my gratitude to my colleague and friend, Dr. Sylvan Lashley, who encouraged me to pursue the limits of academia. I am truly indebted to him.

My heartfelt appreciation goes to Dr. Lyndon Furst, whose constant positive attitude, expertise, and counsel reminded me that the accomplishment of this task was inevitable.

To Dr. Jimmy Kijai, my gratitude is extended for his enduring counsel and assistance with regard to the various statistical methods used in this study.

I am also indebted to Dr. Larry Turner, whose knowledge and insight made this challenge the more appreciable.

I am eternally grateful to my friend, counselor, and adviser Dr. Bernard M. Lall for his guidance and understanding throughout my entire doctoral program. He has been an inspiring source of knowledge, wisdom, understanding, encouragement, and support.

This research would not have been possible without the assistance of the many Research I & II university provosts who took part in this research by completing the instrument. To all of them I am thankful.

A special thanks to my parents, Haldane I and Rosita Davies, for their assistance, encouragement, and support, and to my friends and relatives who helped in any way to make my vision a reality.

Finally, to my dear wife, Janice, and our son Haldane III, thank you for having confidence in me.

CHAPTER I

INTRODUCTION

With the development of higher education the research university administrative structure has taken on new meaning. Offices and functions have evolved to provide for more efficient and effective administration of educational institutions. One such office has been that of the provost. Very little research has been undertaken on the role and function of the provost (see Dissertation Abstracts International — The Humanities and Social Sciences, 1974-1994; ERIC; American Dissertation Abstracts; The Role of the Provost in American Colleges and Universities, 1967).

The general theoretical framework underlying such research evolves from the philosophies of social theorists such as Getzels and Guba (1954). They view administration as a social process, in which behavior is conceived as a function of both the institutional and individual dimensions of the social system. Structurally, Getzels and Guba envisage administration as a series of superordinate-subordinate relationships within a social system. Functionally, they describe this hierarchy of relationships as the locus for allocating and integrating roles, personnel, and facilities.

Shea (1967) studied the role of provosts, the characteristics of effective provosts, and the responsibilities of provosts. This has been the only study of this nature reported in the literature. Responsibilities included finance, public relations, facilities management, legislation, student services, administrative and teaching staff administration, and general academic administration. It has been found that the precise roles/functions (herein after referred to as functions) of provosts varies from institution to institution. This requires each university to work out its own formula and mandate.

Rationale

In the business and corporate world many researchers have developed decision-making tools for executives (Drucker, 1985; Heller, 1992; Hiam, 1990; Jamrog, 1988; Kaufman, 1987; Larson, 1988; Nemoto, 1987; Orpen, 1986; Tyndall, 1988). These researchers among others offer a unique collection of proven decision-making techniques and management ideas. These have been used to resolve the many diverse business challenges facing top-level executives of successful Fortune 500 companies.

It is not the purpose of this study to show how provosts differ from corporate executives and why business decision-making models should or should not be used by provosts. Although there are some similarities such as clientele and money there are also significant differences. These differences pertain to micro-factors that are unique to educational administration such as needs of the university community, job descriptions specially geared for educational

administration, expectations of university groups, and philosophy of administration. The bottom line for corporate decision-making is dollars and cents (stock market, interest rates, etc.) whereas provosts administer educational institutions that require decision-making that serve to benefit the diverse qualifying needs of individuals and organizations including the university.

Decision making is a constant activity of the office of the provost. There is, however, no clear definition and empirical analysis relative to the nature of the relationship among selected internal/external variables (herein after referred to as variables) as they influence decision-making in the research university provosts' functions. Moreover, it has not been determined how relationships among selected variables affect decision-making in these functions.

One core issue has been basically neglected. It is the examination of forces (such as philosophy, experience, and expectations of others) in the environment. These may very well affect and influence the provost's decision making in his/her many functions. Research is needed that will assess the nature of the relationship among selected variables as they interact and relate to influence decision making.

The provost has had categories of functions established for him/her (1) ByLaws, 1980; (2) Selected Research University Pilot Study, 1994; (3) Shea, 1967. The tendency of scholars and significant others in the field of educational administration has been to stress these functions. They have thus tailored educational preparatory programs to reflect these functions. This emphasis,

though useful, disregards an important dimension. It is the area of forces or variables that may affect and influence the provost in his/her perception of the various functions attributed him/her.

Statement of the Problem

This study described and examined the relationship among selected variables as they influence decision making in the function of the provost in Research Universities—universities located in six geographic regions (Northeastern, Atlantic, Midwestern, Western, Southern, and South Eastern) of the United States.

Specifically, the following questions were examined:

1. What are the relationships among the nine variables with respect to each of the 11 functions?

2. Are there differences among the variables with respect to their importance to decision-making relative to each function?

3. Are there differences among the responses of the provosts with respect to the importance of the variables due to field of study, and age?

Theoretical Framework

Individuals are influenced by numerous variables in the environment as they pursue their various functions. Such influences cause them to make decisions in a certain manner. The intensity and manner of the influence is directly related to the degree of importance which they attach to these variables.

Behavior operates within two dimensions. It internally and externally interrelates to cause a condition of homeostasis—a situation of balance or least stress. The individual strives to maintain this balance through a series of actions, that are based on perceptions of their environment. The individual integrates and arranges the variables which act as stimuli in the environment. This is done in such a pattern and manner that tends toward a condition of least stress or homeostasis (Jones & Gerard, 1967).

Each individual receives stimuli from within and without. Based on psychological dispositions, individuals may tend to be either internally or externally influenced (combinations of both may occur, but individuals may show a leaning toward one dimension) (Jones & Gerard, 1967).

Insko and Schopler (1972) believe that whenever the individual experiences a state of imbalance, or his/her internal and external environments are disproportionate, changes occur. These changes are made to restore this balance and are exhibited in the form of behaviors—decisions.

The individual, then, must make a decision concerning the degree of significance that he/she will attach to the variables within each dimension. The perception he/she makes about the significance of these factors affects the manner and the intensity of his/her function perception and hence his/her decision-making.

Thus, his/her behavior in any given situation can only be defined and analyzed in the context of the relationship among the variables influencing decision-making in the perception of his/her functions. This interaction is crucial

to decision-making and should receive more attention in the study of the functions of provosts as perceived by significant others.

The theoretical framework consists of a series of substantive factors. The provost, for example, must allocate a degree of significance to university community expectations and needs as he/she makes decisions. As with other individuals, provost decision-making may be regarded as a behavior which is in response to environmental stimuli. This environment consists of two areas: the provost himself/herself (internal environment) and others (external environment).

Anderson and Carter (1978) suggest that organisms repeat behaviors for which they are rewarded and avoid those for which they are ignored and punished. An internal feedback system will allow for an appraisal of each step. That is, an individual appraises the environment, the stimuli, each decision area, and uses the information gained to make further decisions within the system. Response may be evaluated in terms of whether it leads to survival or non-survival of the decision. The response determines if it will become a basis for other similar actions.

Furthermore, decision making within these functions carries its share of concern. Quantitative modeling theory, if it considers the psychology of the decision maker at all, assumes that the decision maker's behavior will be rational (Simon, 1976).

People, not organizations, make decisions. People, however, do not exist in a social vacuum. They are surrounded by fellow members and are embedded in a network of social relationships. People often associate in decision-making groups

such as work teams, budget committees, board of directors, political action committees, and planning groups. Individuals make decisions about alternative plans and courses of action that maximize their desired outcomes (Pennings, 1986).

Decision-making strategies have been described by numerous theorists. Simon (1976, p. 25) uses the term "satisficing" to describe the behavior of an individual who seeks a solution good enough to satisfy a minimum set of conditions. Miller and Starr (1967) speak of "incremental improvements" as a satisficing strategy which moves the decision maker gradually toward an improved solution. Lindbloom (1959) describes this process as "muddling through." Etzioni (1967) proposes a process he calls "mixed scanning" to describe decision-making behavior. He sees a process of suboptimizing being used to make the fundamental decision combined with incremental modification. While none of these procedures is universally accepted, they are important in that they describe the "nonrational" character of decision making (Pennings, 1986).

The quantitative disciplines view decision-making as a rational process. In general, this method consists of a series of steps:

1. Identify the problem
2. Determine goals and objectives for solving the problem
3. Gather the necessary data
4. Formulate an analytic model of the problem
5. Select alternatives to be evaluated
6. Evaluate alternatives
7 Select the preferred alternative
8. Implement the preferred alternative. (Byrd & Moore, 1982, p. 10)

The process that an individual or organization goes through in making decisions in the business world is very well established (Hiam, 1990). There is, however, no clear evidence as to the effect of certain selected influences as they affect decision making in the functions of research university provosts.

Recently, the expectations for the role and function of the provost as noted in numerous job descriptions and job specifications have undergone many changes. Some changes have limited the scope of the function of the provost while others have expanded it. This has created an agitation for a more refined and selected definition of the function of the provost.

It was important, therefore, that a study of this nature be carried out. Such a study would certainly add to the efficiency, effectiveness, and productivity of research university administrators and providers of higher education alike. It could provide pertinent information that could shape decision-making models in higher education.

For purposes of this study, the following is a list of functions common to research university provosts as well as a list of variables that relate to decision making within the said functions. The list of functions result from a review of a number of job descriptions pertaining to the position of the provost. The list of variables were modified from an instrument and verified by provosts by means of a pilot test.

Functions:

1. General academic administration
2. Academic budgeting
3. Academic personnel administration
4. Academic program administration
5. Academic freedom administration
6. Student recruitment administration
7. Academic records administration
8. Academic facilities administration
9. State education liaison
10. Public relations
11. Fund raising.

Variables:

1. Philosophy of administration
2. Formal preparation
3. Requirements of job description
4. Success in grants and endowments
5. Experiences gained on the job
6. Length of time in position
7. Needs of the university community
8. Expectations of university groups
9. Expectations of national educational "think tanks."

These lists of functions and variables can be reasonable parameters within which one can test for relationships among selected variables affecting decision making in the functions of research university provosts.

Significance of the Study

An exploration that stresses variable/function relationships has extensive implications for educational administrators. The relationships and differences among variables may suggest definite decision-making patterns and allow for some measure of meaning between variables and functions.

Professors of educational administration and "think tanks" may be able to determine how provosts of specified educational qualifications and age ranges are likely to be influenced in decision making by variables in the environment. This investigation revealed that there are relationships and differences among variables with respect to their importance to decision-making. More emphasis may need to be placed on philosophy of administration, the value of job experience, and the importance of understanding the needs of the university community. Less emphasis may need to be placed on formal traditional training for students of educational administration.

The nature of the relationships among the selected variables affecting decision making in the research university provost's function was determined and examined for patterns and combinations. Suggestions as to why these variables correlated with each other were made. Perhaps studies could be conducted to

determine how combinations of such variables in the environment interact and relate to influence decision making.

Definition of Terms

The following terms as used in this dissertation are hereby defined as follows:

Job Description: Each job within an organization has prescribed requirements. These are usually codified by means of a job description and/or job specification. Job descriptions and specifications are liable to institutional, organizational, and personal forces and influences. Over a given period of time, such job descriptions and specifications tend to become norms or customary requirements for the position. This is especially so for individuals in office and also for individuals succeeding them. This set of requirements becomes a variable that influences or affects the provost's decision-making.

Environment: Environment refers to the habitat, conditions, or surroundings of an individual—the life, space, or area one occupies, whether mental, physical, spiritual, psychological, or social—from his/her environment.

Expectations of university groups: The expectations represent the desires, wishes, hopes, prospects, and aspirations of specific interest groups within the university community. In the process of time, members of the university community grow to anticipate certain demonstrations of behavior as being characteristic of the provost. The provost needs to determine how much weight

he/she should allot to student, faculty, and other administrative personnel expectations whenever he/she engages in decision making.

External variables: External variables refer to those influences, forces, pressures, or stimuli in the environment tending to be outside of the provost's span of control—"without variables." The provost has little or no control over the influences, forces, pressures, or stimuli that make up the external environment.

Internal variables: Internal variables refer to those influences, forces, pressures, or stimuli tending to be within the provost's span of control—"within variables." The provost demonstrates some degree of control over such variables.

Provost: The term "provost" is used in the context of the university and refers to the individual who ranks second in command to the president and who is responsible for the general oversight of the various schools, support units, and development of the university.

Research I & II university: The research university operates within the context of the university definition. Whereas a university can be a private or public undergraduate/graduate institution, the term research I & II university as used in this study refers to a private/public, financially endowed, prestigious, grant-supported, undergraduate/graduate educational institution. It designed for instruction or examination, or both, of students in many branches of advanced learning. Each typically has an enrollment of more than 15,000 students.

Research I & II universities are generally geared to the specific needs and interests of above-average to excellent achievers, and has stringent admission

policies when compared with other universities. These universities offer a full range of baccalaureate programs. They are committed to graduate education through to the doctoral degree, and give high priority to research. Each receives annually at least $115.5 million in federal support, and each awards at least 290 Ph.D. degrees each year (see A Classification of Institutions of Higher Education, 1987 ed., and The Almanac of Higher Education, 1993). The research I universities receive the highest 20% of research funds.

Function: A function is a socially expected behavior pattern usually determined by an individual's status in a particular society or social setting. The provost, as a member of a social setting, has expected behavior norms called functions within which he/she makes certain decisions. In this investigation, the concept of function is used synonymously with the concepts of task, purpose, and character.

Delimitations of the Study

This study was concerned specifically with relationships among selected variables and differences between the variables with respect to their importance to decision-making in the functions of research I & II university provosts. This study also examined the differences among the variables with respect to fields of study and age of the provosts. Information gathering was limited to a survey questionnaire that was adopted and pilot tested for this purpose.

Organization of the Dissertation

Besides chapter 1, which includes the introduction, rationale, statement of the problem, theoretical framework, research hypotheses, significance of the study, definitions, and delimitations, the rest of the dissertation is organized into four chapters.

Chapter 2 introduces a review of the related relevant literature which features an inclusive review of the development of the research university, a study as to the development of the function of the provost, and the influences, forces, and stimuli affecting decision making and demeanor.

Chapter 3 recounts the methodology and procedures employed in this study. The population is described, the demographic, internal/external variables and role/function are described and delineated, the type of research is described, and the steps followed in developing the instrument are described. It also includes a brief overview of the procedures employed in data collection, recording, and analysis. An introduction of each hypothesis and its corresponding mode of analysis is given.

Chapter 4 presents the findings and analyzes the data. Each hypothesis is described in the form of answers to corresponding questions posed in chapter 1. The hypotheses are evaluated according to set criterion levels.

Chapter 5 presents the summary and conclusion and suggests numerous recommendations as well as questions for consideration and further study. The

appendix includes letters, questionnaires, lists of research universities, statistical results, and other supporting materials used in this study.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

This chapter presents a review of the related literature and furnishes a knowledge and premise for the establishment of the theoretical framework for the foundation of the study. This study investigated the relationships among selected variables affecting decision-making in the functions of research university provosts.

The literature review includes discussions on the historical evolution and nature of the research university and of the function of the provost in the research university. There is also a summary of the development of the provostship, and related studies. A rationale supporting the selection of an internal/external dimension and the assumed relationship between these variables and decision making within the named functions is included as part of the discussion.

The method of presentation in the literature review progresses from the general to the specific. This ensures the development of a clear and understandable background.

Historical Evolution and Nature of the Research University: A Discussion

The establishment of higher education in the United States dates back to the founding of Harvard College in 1636. The growth and development of the liberal arts college is an exclusive American creation. Many factors greatly influenced the development of this unique model of higher education. They include the native American frontier conditions, a desire to educate the public, and a growth of democracy in every area of American life (Brubacher & Rudy, 1968; Chamberlain & Shilling, 1967).

McGrath (1966) expressed three phases of educational change in the liberal arts colleges during the 19th century. First, the irresistible influx of new knowledge, particularly in the sciences, forced the tightly fused curriculum to come apart. Second, the transition of the United States into an industrial and commercial society generated a need for competing vocational programs. With them came additional pressures. Third, and probably the most significant impact, was the increase of graduate education and research.

Perhaps the most outstanding stimulus in the growth of higher education in the 19th century resulted from the passage of the Morrill Acts of 1862 and 1890. These acts provided for substantial land and financial grants for the founding of new public colleges and universities. According to Apps (1988), the Morrill Act of 1862 was the beginning of America's most unique contribution to higher education.

The coming of the industrial revolution, with its technological requirements, influenced the growth of higher education. The events of World War I, World War II, post-World War II, the cold war, and the information age continued the accentuation of the growth of higher education in the United States.

Development of the Provostship

Early Use of the Title Provost

The title "provost" first appeared in the academic world in the early 14th century. However, the office dates back to Roman times. The Oxford dictionary states that the word "provost" comes from the Latin "praepositus." It refers to the title of the Roman prefect who represented the emperor both in Rome and in the provinces (Smith, 1909, p. 1528).

"Provost" was the title given to an officer who represented the highest authority. It was adopted by the early church to designate that officer in a community of religious persons who ranked next to the leader (Smith, 1913, p. 4807). When the medieval universities were founded in England, the term "provost" was chosen to be that of the chief officer of those early academic institutions.

Medieval Universities

The first time the title "provost" appeared associated with an academic institution was in an instance at the University of Paris. This was in the early years of the 13th century (Halmagrand, 1845, p. 82). Although the prefect of the

University of Paris was not an academic officer, he did become involved in the institution as a result of what may have been the first major "town and gown" controversy on record.

The first appearance of a provost as an academic officer, as opposed to the municipal officer as found in Paris, occurred in the founding of the early Colleges of Oxford University in England. An early description of the Oriel College of Oxford stated: "The college consisted of a provost and ten scholars, at least bachelors of art, who, after completion of regency, were to study the theology, except three, who might be allowed to study civil canon law" (Rashdall, 1936, p. 205). The pattern of Oriel College seems to have been followed by the next two units of Oxford University to come into being—Queens College and Kings College.

At Oriel College, a dean was appointed. He was elected by the scholars of the College, as was the provost, to assist the provost and to act in his absence. Apparently, some non-academic officers were appointed to assist the provost in his business affairs. These included treasurers and bursars. There was no report of other academic officers (Mallet, 1928, p. 256).

Whether elected by his fellows or appointed by the Crown, this office was clearly the chief authority of these institutions. Their success or failure depended largely upon the provost's ability not only to manage the institution itself, but also to handle the delicate diplomatic relationships between the institution and the

reigning authority. In summary, it may be said that the provost in the early English colleges and universities was essential to the growth of those institutions.

In early universities, the office of the provost covered a wide variety of duties. These included areas of academic administration, business management, and student personnel work—the latter, in those days largely concerned disciplinary matters rather than counseling.

American Colonial Universities

The University of Pennsylvania

The office of provost first appeared in the American colonies in Philadelphia (Nitzsche, 1914, p. 11). In June, 1755, the trustees of the College of Philadelphia petitioned the governor to grant the "appointment of a provost teaching the philosophic branches and having general oversight of the students, and a vice-provost who is to be head of the Latin school and rector of the academy" (Cheyney, 1940, p. 43). Other than his academic discipline, the only additional prerequisite for provost was that the incumbent be required to take the oath of supremacy and allegiance to the British Crown.

Dr. William Smith, first provost of the College of Philadelphia, was an eminent scholar of his day. He was also a prominent clergyman, an author of several religious works, and an experienced professor at the old academy in Philadelphia. With his election to the provostship, he inherited all the tasks assumed by his predecessors in the early English universities (Shea, 1967).

One of his earliest concerns was finding the finances to maintain the College of Philadelphia at the academic level which he had advocated. During his 36 years as provost, Smith did much to develop the college financially. It also became a first-rate collegiate institution of its day.

In 1930, a president was appointed to the University of Pennsylvania, and the chief administrative authority was transferred to him. Since that date, the president has been the head of the university and the provost has been his chief executive in academic areas (Goddard, 1965).

Columbia University

From a modest beginning emerged Columbia University, as it is known today. The institution lived through the American Revolution in its early days. It survived the difficulties of the times and, thanks largely to the work of Alexander Hamilton, was granted its revised charter in 1787. It was nearly a quarter of a century later, however, before the first provost was chosen for the institution (Shea, 1967).

The appointment of a provost even at that time, however, was based more on meeting an administrative problem of the college. The college authorities recognized the need for a specific officer with specific duties. As the years passed, the office of the provost apparently assumed a permanent status in the administration of Columbia University. The duties of this office became purely academic in nature.

The 1957 edition of the statutes of Columbia University observes that the provost was given the authority to act as head of the university in the event of the retirement or removal from office of the president. This took effect pending the election of an acting president or president by the board of trustees. These later amendments to the statutes described in slightly different language the office of the provost. It was clear, however, that its chief function is that of head of the academic or educational system of the university (Columbia University, 1957, 1).

At Columbia University, we see for the first time the development of the office of provost as essentially an academic office. The concerns of the provost were limited to the academic program. This was in contrast to encompassing the overall administration of the college as was found in the University of Pennsylvania.

Modern Applications

Within modern times, the office of the provost has been redefined and restructured. Essentially, this has been in order to ensure a more efficient and effective operation, especially at the top. Many separate and distinct schools, colleges, academic and support facilities, and institutes now operate within universities. This has resulted in the need for more oversight and coordination to ensure that all entities operate according to the vision and mission of the university.

Moreover, the numerous responsibilities of the university president have overwhelmed his/her ability to effectively function as the university's chief

academic administrator. These responsibilities include fund-raising, development, boards and committees, and ambassadorial responsibilities.

Although most universities have established functions for their chief academic administrators, there still exists some degree of fuzziness about the function of the provost. Functions vary from institution to institution and from provost to provost. The literature, however, indicates some generalities in regard to his/her function.

Along with the president, the provost has the responsibility for assuring that the institution has vitality. He/she also ensures that the university possesses a cohesiveness that derives from common objectives and maintains a good quality in all teaching and research.

A number of factors affect the functions of the provost. These help to account for some of the vagueness of the responsibilities of the office and the differences occurring among institutions. Some of these factors are philosophy of administration, job experience, needs of the university community, time in position, and expectations of university groups.

The Function of the Research University Provost

Evolving trends in education have more accurately defined the functions of the provost. In some institutions, the provost is a chief administrative and executive officer capable of directing, planning, managing, and evaluating programs. This position oversees and provides leadership in the areas of enrollment management including (1) student recruitment, admissions, registration

and records, (2) student enrichment including orientation and retention programs, career services, and counseling/health services, (3) academic services including accreditation, curriculum, and academic freedom, (4) financial services including budgeting, financial aid, fund raising, grants, and endowments, and (5) student life including student activities, student code administration, residential life, multicultural students, and adult learner services.

The provost is generally appointed by the Board of Trustees upon the recommendation of the president. He/she is required to report to the president and to serve as acting president in his/her absence. He/she also serves as second-ranking official and chief academic officer, administers the instructional program, the personnel, and the budgets of all academic areas and community education. He/she also shapes academic strategy within a collegial cooperative-shared governance structure.

He/she is responsible for the leadership and management of the University's academic administration, academic budget, personnel administration, program administration and publication, academic freedom and responsibility, recruitment and admission, registration and certification, academic facilities planning and administration, fund raising, and liaison.

As an example, Article 4 of the Board of Trustees Bylaws (1980) of Michigan State University contains the following section on the Provost of the University:

> The Provost of the University shall be appointed by the Board upon the recommendation of the President, shall serve at the pleasure of the Board, and shall

give bond satisfactory to said Board to secure the sacred performance of the duties of the office. Subject to the President and the Board the Provost:

Shall be the principal academic officer of the University and administer the various colleges, special units and academic support facilities. (Function: General academic administration)

Shall be responsible for assembling and administering the academic budget. (Function: Preparation and administration of the academic budget and primary responsibility for formulation of the academic portion of the University's budget request)

Shall be responsible for faculty personnel administration including procedures for faculty appointments and terminations, salaries and promotions, working conditions, and tenure. (Function: Academic personnel administration)

Shall be responsible with advice from the faculty for development of new academic programs and for keeping existing programs updated and in conformity with University educational policies. (Function: Administration that ensures academic freedom and responsibility)

Shall be responsible for ensuring that academic procedures preserve academic freedom and ensure academic responsibility. (Function: Administration that ensures academic freedom and responsibility)

Shall be responsible for supervising procedures and polices related to the admission of students, and liaison with high schools and community colleges. (Function: Recruitment and admission of students; liaison with high schools and community colleges)

Shall be responsible for supervising the registration process and for the orientation of new students. (Function: Registration, certification, orientation, organize and maintain permanent student academic records)

Shall be responsible for administering academic facilities and support units such as Libraries, and Computer Laboratory. (Function: General academic administration)

Shall be responsible for liaison with the State Department of Education. (Function: Liaison with Department of Education, State of Michigan)

Provost as Principal Academic Officer

The provost promotes and facilitates academic excellence within available resources. This is in keeping with the vision and mission statement as adopted by the Board of Trustees. Along with his/her staff, he/she functions to facilitate the effectiveness of faculty and other academic personnel, academic administrators, academic units, academic support units, and students.

The staff (of the Office of the Provost) is responsible to the provost for proper academic administration in accordance with the vision and mission statement and with University polices, procedures, rules, and established practices. All those involved in academic programs are responsible to discharge their assignments diligently, in a timely manner, and at the highest possible level of excellence.

The provosts and each of the vice provosts, deans and separately reporting directors maintain one-to-one interactions. This is in the interest of the greatest possible effectiveness and efficiency of all the academic units and programs. In turn, the deans are responsible for communications with (1) chairpersons and directors of schools who report to them, (2) with those other deans who have joint responsibility for departments, schools, other units, and activities, and (3) joint responsibility for personnel and other administrators as appropriate.

Studies on the Role of the Research University Provost

Studies on the role of the provost have been extremely limited. Although most universities appoint provosts to the second ranking executive office of the institution, very little has been written on this office.

A review of Dissertation Abstracts 1876-1994; ERIC; and Dissertation Abstracts International reveals only one study on the role of the provost. There are 7 studies on the role of the academic vice president, and 37 studies on the role of the academic dean. The lone provost study, The Role of the Provost in American Colleges and Universities, was done by Robert H. Shea (1967). It must be noted, however, that the structure of research universities with provosts allows for an assistant provost for academic services such as admission, scholarships and registration.

In this project (see Appendix D), Shea made the first study of the duties of the provost as an officer in American colleges and universities. The study indicated that the provost, in most instances, was the chief academic officer of his/her institution. Duties varied somewhat depending on the size of the institution but not significantly in terms of institutional control.

Although clearly administrators, the provosts almost universally indicated a continuing interest in classroom activity, and many were engaged in teaching. They spent considerable time with their peers in the administrative apparatus and with department heads and faculty groups. However, they engaged minimally in such tasks as fund-raising, public relations, and plant management.

Some notable exceptions were discovered. At Teachers College, Columbia University, the provost was the student-personnel services administrator. At the Claremont Colleges, the post rotated on an annual basis among the member college presidents and was largely a public relations, development, and ceremonial office.

The provost of the University of the State of New York, which is an administrative entity operating state-sponsored higher education, was concerned with academic affairs in the several institutions that make up the University but with no one campus under his control.

Decision-making

Decision-making at any level is an energy consuming leadership function. It is the process by which decisions are arrived at and implemented. A decision is classified as a choice between alternatives that is influenced by the many variables that exist in the environment. The purpose is to arrive at the best choice. Due to the many elements that constitute decision-making, arriving at the best choice may not be as easy as it usually seems (Lall & Lall, 1994).

Gabriele (1987) argues against the current trend in giving importance to subjective values in educational administration, particularly the argument that attention to subjective values can overcome the perceived irrelevance of scientific administration and organization theory and help administrators make better decisions.

Willower (1992) sees Dewey's work as instrumental to decision-making. Dewey saw human behavior as relatively automatic, with habit and impulse playing major roles in the process of reflective thinking within decision-making.

Before leaders can become more effective decision-makers they must reflect upon the nature of an effective decision. The effective decision is not necessarily a perfect decision but the best decision that could possibly be made in the circumstances. Adair (1986) suggests some key questions that educational administrators may ask themselves throughout the decision-making process. They are:

1. Have I defined the objective
2. Do I have sufficient information
3. What are the feasible options
4. Have I evaluated them correctly
5. Does this decision feel right now I have begun to implement it? (p. 156)

In most cases decision-making is learnt on the job, partly from wise practitioners in the craft and partly by personal experiences. As experience accumulates, leaders move with greater sureness and speed though always learning more. Leadership in educational administration is not solely about getting the intellectual quality of a decision right. It is about getting results through people.

Rationale Supporting the Selection of an Internal/External Dimension

A psychological and systems approach are seen as the basis for establishing a relationship between environment and behavior. It has been demonstrated by Skinner (1938) that environment has an impact upon behavior. In addition, other

approaches to the study of behavior have suggested that the basis of behavior is rooted in early life experiences (psychoanalytic). The educational trend has been a total push or eclectic approach to the study of human behavior (Lugo & Hershey, 1979). This study selects a behaviorist-systems approach (environment—stimulus/response—energy transfer) as the basis for experiment.

The Relationship Between Environment and Behavior: A Discussion

Numerous variables that exist in the environment act as determinants of individual behavior. These variables become determinants through a system of allocations. The individual perceives a variable as significant or insignificant based upon his/her expectation of the magnitude of the feedback.

Dependent upon this perception, an action follows. The response contributes to a homeostatic condition that acts as an indicator of balance or imbalance (Insko & Schopler 1972).

The research university is a social system, and the provost is a part of that system. Anderson and Carter (1978) used the concept of "energy" to account for the dynamic movement in a social system. Such "energy" is not directly observable. It is inferred through its effects on the system—that is, in terms of the research university provost, the effects of the decision on himself/herself and others. This suggests that decision making and its effects may be dependent upon an internal/external environment represented by variables.

Lasslo (1972), cited in Anderson and Carter (1972), describes the relationship between the individual (system) and the environment. He suggests that decisions are continually used to maintain the relationship of the parts to keep them from collapsing in decay. This ensures that the system (the individual) performs its (his/her) functions in such a manner as to continue its (his/her) existence.

The differences and subtleties of decision making in various functions provide for a release or transfer of "energy" (decision making) across boundaries. Boundaries are not to be confused with barriers. An example of boundary would be decision-making activity ("energy") flowing reciprocally between the provost's internal and external environments. Thus, the use of the concept "energy" is seen as a construct meaning action (decision-making) or the potential for action (Anderson & Carter, 1978).

Organizational culture is an essential construct in contemporary efforts to improve managerial and organizational performance (Deal & Kennedy, 1982; Ouchi, 1981; Peters & Waterman, 1982). Schein (1985) explains that the centrality of culture in these efforts is due to the capacity to solve the "basic problems"—problems of (1) organizational survival in and adaptation to the external environment, and (2) integration of internal processes to ensure the capacity to continue to survive and adapt (p. 50).

Culture contributes to the solution of issues. This is done by providing consensus about mission, strategy, operational goals, means, performance criteria,

and remedial and repair strategies. It also contributes to the solution of internal integration issues through providing harmony about language, conceptual categories, and group boundaries. It establishes criteria for differentiation of influence and power (i.e., stratification), intimacy (i.e., peer relationships), and the allocation of rewards and punishments (Schein, 1985, pp. 52-82).

Organizational culture has been defined by numerous researchers. The cultural anthropologists Kroeber and Kluckhohn (1952) found 164 different definitions of culture. Ott (1989) summarized an anthology of 58 books and articles that defined organizational culture differently. The definitions ranged from the simple to the complex, with no single definition acceptable to all researchers (Shaw & Reyes, 1992).

Culture is described as social glue (Smircich, 1983) and organizational blinders (Krefting & Frost, 1985). To Bower (1966), organizational culture is "the way we do things around here." To Lortie (1975), "Culture includes what members of a group think about social action. It encompasses alternatives for resolving problems in collective life" (p. 216).

Most research on organizational cultures in colleges and universities embraces either a sociological or a cultural anthropological perspective. This is grounded primarily in indepth interview and participant observation methodological traditions (e.g., Chaffe & Tierney, 1988; Clark, 1970; London, 1978; Tierney, 1991).

Psychologists, on the other hand. rely primarily on survey research methodology grounded in Jung's (1923) "psychological archetypes." They also use Quinn's (quoted in Smart & Hamm, 1993) competing values model to conduct their analyses of organizational culture. Embedded in these two streams of research is an obvious tradeoff. This is between the rich, indepth qualitative analyses of a single or few organizations by sociologists and anthropologists and the multiple, comparative observations from survey research conducted by psychologists.

The National Center for Higher Education Management Systems (NCHEMS) sought to blend these two research traditions through the development of an instrument. The Institutional Performance Survey (IPS) measures the organizational cultures of colleges and universities. This is done with written descriptions of cultural scenarios based on Jung's psychological archetypes and Quinn's competing values framework, rather than conventional Likert-type attitude survey items (Krakower & Niwa, 1985).

The scenarios that are the basis of the IPS organizational culture scales serve as "word pictures" that "help respondents convey not just the extent to which they are satisfied or dissatisfied with their organization (climate) but the core values and orientations that characterize it (its culture)" (Cameron & Ettington, 1988, p. 375).

Consistent empirical evidence supports the validity of the four dominant organizational culture types that evolve from responses to the IPS cultural

scenarios. For example, colleges and universities with "clan" cultures evidenced high morale and collegial decision-making styles. "Clan" cultures emphasize shared values, goals, and the development of human resources. Their interactions with the external environment are characterized by reactive, implementor-type strategies. Internal transactions are guided by congruence of beliefs, trust, and tradition. The leader is generally considered to be a mentor, a sage, or a father or mother figure (Cameron & Ettington, 1988).

Those with "adhocracy" cultures employ innovative strategies and boundary-spanning activities. "Adhocracy" cultures emphasize entrepreneurship, growth, and adaptability. Their interactions with the external environment are characterized by proactive, innovative, and boundary-spanning activities. Internal transactions are guided by a commitment to innovation and the importance or ideological appeal of the task being undertaken. The leader is generally considered to be an entrepreneur, an innovator, or a risk-taker (Cameron & Ettington, 1988).

Colleges and universities with "hierarchy" cultures possess mechanistic structures and lack slack resources. "Hierarchy" cultures emphasize the norms and values associated with bureaucracy (e.g., order, uniformity). Their interactions with the external environment are characterized by reactive, defender-type strategies. Internal transactions are governed by formally stated roles and enforced through rules and regulations. The leader is generally considered to be a coordinator, an organizer, or an administrator (Cameron & Ettington, 1988).

Those with "market" cultures are proactive and adopt strong market initiatives. "Market" cultures emphasize competitiveness, environmental interaction, and customer orientation. Internal transactions are governed by beliefs that competent performance directed toward desired organizational outcomes will be rewarded. The leader is generally considered to be a producer, a technician, or a hard-driver (Cameron & Ettington, 1988).

Similarly supportive evidence is provided by Zammuto and Krakower (1991). They report that the IPS organizational culture scales are correlated with measures of organizational characteristics (e.g., centralization), climate (e.g., trust, morale), and strategy orientations (e.g., reactive, proactive). This is in a manner that generally fits the predictions of the underlying conceptual frameworks. For example, the degree to which colleges and universities evidence a "hierarchy" culture is positively related to centralization and reactive strategic orientations, and negatively related to trust, morale, and leader credibility.

They conclude that "it is possible to develop a valid survey instrument to study organizational culture," since their results, using the IPS, "met the criteria of internal consistency, predictable relationships with other organizational phenomena, and discrimination among groups" (Zammuto & Krakower, 1991, p. 109).

The effectiveness of colleges and universities is no doubt a combination of both powerful forces in the external environment and strong forces that emanate from within these institutions. Cameron (1986) concludes, from an exhaustive

analysis of dozens of predictors of organizational effectiveness, that the most powerful factors associated with effectiveness in colleges and universities tend to be internal factors—factors under the control of campus officials. He provides compelling evidence that institutions "may be effective . . . in spite of their environments" (p. 103).

Similarly, Cameron and Tschirhart (1992) demonstrate that certain internal management strategies and decision processes (e.g., participative and political decision processes) seem to mitigate the effects of negative external environmental attributes (e.g., increasing competition, unpredictability, turbulence, and decline) in institutions of higher learning.

Chaffee and Tierney (1988) agree with Schein (1985). They suggest that the single most fundamental construct in the dynamics of a college or university is its culture. Further "our lack of understanding about the role of organizational culture in improving management and institutional performance inhibits our ability to address the challenges that face higher education" (p. 8).

Cameron and Ettington (1988) found a clear relationship between the dominant culture type of 4-year colleges and universities and the effectiveness of these institutions. For example, 4-year institutions manifesting the attributes of "clan" culture are more effective in promoting higher levels of internal morale among students, faculty, and staff. Those exhibiting the characteristics of an "adhocracy" culture are more successful in their efforts to adopt to the external

environment, while those reflecting the "market" culture are most successful in their ability to acquire necessary resources.

Summary

The research university developed in an atmosphere of a quest for improved answers in the areas of research and development in higher education. It was rooted in the belief that education should be dynamic and progressive and not static and regressive, especially within the context of democracy, adaptability, comprehensiveness, and scholarship-centeredness.

The position of university provost was borrowed from the Greeks and Latins and has become a functioning part of the university and liberal arts college. The provostship is an outgrowth of the presidency which steadily became a hub of diverse activities. Many presidents were forced to relinquish direct control of the academic administration of their universities. Several broad functions as ascribed to the provost evolved after a review on the literature of academic administration of research universities.

The research university provost is responsible for all educational areas. These include general academic administration, academic budgeting, academic personnel administration, academic program administration, and publications, as well as academic freedom and responsibility, recruitment and admission, certification and records, fund raising, development, collective bargaining, and liaison with the state department of education and other related publics.

Relationships exist between environment and behavior. Decision making (behavior) results from a series of environmental stimuli categorized along internal and external dimensions. Any decision-making activity or behavior is symbolized by the construct of "energy." This concept is used to describe unobservable activity that occurs when a decision is made. For the system (individual) to continue its (his/her) existence, decisions must produce some psychological homeostasis or balance.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to investigate the relationships among selected variables affecting decision-making in the functions of research university provosts. This chapter gives an account of the methods and procedures used to undertake the study. The sections are as follows: (1) design of the study, (2) variables and functions, (3) procedure, (4) data analysis, (5) hypotheses, and (6) summary.

Design of the Study

This study employed the survey research method to investigate the relationships among selected variables affecting decision-making in various functions. A demographic questionnaire and a modified instrument used by Lashley (1981) were mailed to research university provosts. The data collected was also used to examine the relationship between the variables and the provosts' educational background, field of study, and age.

Population

The population for this research consisted of sixty-four (64) provosts of public and private research I & II universities in six national geographical regions: the Northeastern, Atlantic, Midwestern. Western, Southern, and Southeastern United Stated (see Appendix A). These universities were selected on the basis of their classification as research universities with provosts (see A Classification of Institutions of Higher Education, 1987; American Colleges and Universities, 1993; and The Almanac of Higher Education, 1993). The total population of 64 research I & II university provosts in the six geographic regions was utilized.

Demographic variables of educational qualifications, field of study, and age were described as follows:

Educational qualifications—The provosts educational qualification was ranked as degrees, i.e., Ph.D., Ed.D., Ed.S., M.A., M.Ed., Other.

Fields of study—The provosts' field of study was classified as educational areas, humanities, and sciences.

Age—The provosts' age was classified into the following groups: 25-39, 40-55, and above 55.

Instrumentation

An instrument used by Lashley (1981) in his study on "The Relationship Among Selected Variables Influencing Decision making Among Community College Deans" was modified and pilot tested for the purpose of this study (see

Appendix C). The goal of the instrument was to measure how provosts see the nine variables as being important to decision making in each of 11 functions.

The instrument was divided into two sections, A and B. Section A requested information on the demographic variables of educational qualifications, field of study, and age. Section B was comprised of a 9 x 11 table consisting of nine variables positioned vertically and 11 functions positioned horizontally. There was one general question to which respondents were expected to answer for a total of 99 times. Each answer for each of the 11 functions was registered in block spaces on a Likert-type scale of decision-making. The scale ranged from a response value of 1 signifying a condition of Hardly Important according to the provost's conception of the stimulus, to a response value of 5 signifying a condition of Extremely Important.

Content validity was procured through the following steps:

1. The questionnaire was submitted to members of the researcher's doctoral committee for scrutiny regarding its relation to the aim of the research and its potential to supply the answers required.

2. The questionnaire was pilot tested among a randomly selected group of research I & II university provosts. This included completing a validity evaluation form, which requested a simple appraisal of the questionnaire regarding its relation to the purpose of the study and its effectiveness in soliciting the necessary information. They also completed the questionnaire which was combined with the responses of the other provosts. There was a 50% percent response rate. The

instrument was rated as satisfactory by 80% of the respondents, while 20% offered minor "wording" suggestions (eg. please).

3. All recommendations were utilized.

Demographic Variables, Variables, and Functions

For purposes of distinction and classification, demographic variables, variables, and functions, were listed as follows:

1. **The demographic variables were:**
    a. Educational Qualifications (degrees)
    b. Field of study
    c. Age.
2. **The variables were:**
    a. Philosophy of administration
    b. Formal preparation
    c. Requirements of the job description
    d. Grants and Endowments
    e. Experiences gained on the job
    f. Length of time in position
    g. Needs of the university community
    h. Expectations of university groups
    i. Expectations of national education "think tanks."

3. **The functions were:**

   a. General academic administration

   b. Academic budgeting

   c. Academic personnel administration

   d. Academic program administration

   e. Academic freedom administration

   f. Student recruitment and admission

   g. Academic records administration

   h. Academic facilities administration

   i. State education liaison

   j. Public relations

   k. Fund raising.

Procedure

Each provost was written two letters, one signed by the dissertation committee chairperson and the other signed by the researcher. The former officially introduced the researcher to the provost, stated the purpose of the study and its importance to academia, and requested participation. The latter explained the procedure, listed the enclosed items, and requested cooperation in completing the questionnaire. University stationery was used to write and mail the letters, and self-addressed stamped envelopes were enclosed.

A card of "first-day-cover" commemorative stamps of the Virgin Islands was included for the return of the questionnaire. Questionnaires were coded

according to region and university and date of mailing for purposes of recognition and sorting.

A letter was also written to each provost's secretary two days prior to mailing the package. It requested their assistance in ensuring that the questionnaire was completed by the provost and returned to the researcher by a stated date. A scenic card of the Virgin Islands was enclosed in appreciation for a job well done. A reminder was sent to the secretary of provosts who had not responded one day after the given date (see Appendix B).

When the data was analyzed, there was a 73% response rate with 55% of the entire population useable. The unusable 18% consisted of questionnaires that were only partially completed and could not contribute to the analysis in any meaningful way.

Data Analysis

This section of the study presents analyses that satisfy the purpose of the study and answer the questions posed. A brief statement of the statistical procedure used to analyze the data and evaluate the questions is as follows:

1. Responses were analyzed by Pearson's Product-Moment Correlation Coefficient to measure the relationship among the nine variables with respect to each of the 11 functions.

2. Responses were analyzed by Analysis of Variance: One-way Repeated Measures to assess the differences among the variables with respect to their importance to decision-making relative to the functions.

3. Responses were analyzed by Multivariate Analysis of Variance to measure the differences among the responses of the provosts with respect to the importance of the variables due to field of study and age.

A tally program was utilized to ascertain the numbers and percentages of provosts in the various classification categories. Provosts were tallied in the following categories:

1. Provosts with earned doctorates
2. Provosts with doctorates in educational areas
3. Provosts with doctorates in the humanities
4. Provosts with doctorates in the sciences
5. Provosts within the age range of 25-39
5. Provosts within the age range of 40-55
6. Provosts within the age range of 55 and above.

Research Questions

Research Question 1

Research question 1 asked: Are there relationships among the nine variables with respect to each of the 11 functions?

Analysis 1

The Statistical Analysis Systems (SAS) (Statistical Analysis Systems Inc., 1990) was used to analyze the data. Pearson's Product-Moment Correlation

Coefficient (Pearson's r) was used to measure the correlation among the nine variables for each of the 11 functions (Hinkle, Wiersma, & Jurs, 1988).

Research Question 2

Research question 2 asked: Are there differences among the variables with respect to their importance to decision making relative to the functions?

Analysis 2

The data were analyzed using One-way Repeated Measure Analysis of Variance to assess the difference among the variables with respect to their importance to decision making relative to the functions. This procedure allowed for the answering of the question of equality of K population means while maintaining the Type I error rate at the preestablished alpha level of 0.05 for the entire set of comparisons.

For each significant overall F, post hoc multiple comparison test—Student-Newman-Keuls Procedure, was computed. This post hoc multiple comparison test maintained the Type I error rate at the pre-established alpha when a series of comparisons were made among sample means. The Student-Newman-Keuls method was used to identify which pairs of means differed following a significant F ratio in the Analysis of Variance when the group sizes were equal (Hinkle et al., 1988).

Research Question 3

Research question 3 asked: Are there differences among the responses of the provosts with respect to the importance of the variables due to field of study and age?

Analysis 3

The data were analyzed using Multivariate Analysis of Variance to measure the difference among the responses of the provosts with respect to the importance of the variables due to field of study, and age.

Multivariate analysis of variance is concerned with association among multiple variables. One-Way MANOVA is applicable where there are several groups (fields of study, age groups) with more than one measure being obtained on each group. MANOVA is useful in determining regularities in the behavior of two or more variables. It is also useful in testing alternative models of association between two or more variables, including the determination of whether two or more entities differ in their multivariate profiles (Green & Carrol, 1976). In this study, group differences (field of study, age) were examined for all nine variables simultaneously.

Summary

The sample for this study consisted of research university provosts in the United States. A questionnaire was used as the basic source to secure the perceptions of the provosts relative to the purpose of the study. Information

presented in this chapter included a design of the study, variables and functions, procedures, data analysis, hypotheses, and summary. The data were analyzed by descriptive inferential statistics—Pearson r, One-way Repeated Measures Analysis of Variance, and One-way Multivariate Analysis of Variance. The findings in relation to each of the three questions are presented in chapter 4.

CHAPTER IV

RESULTS

Introduction

This study was designed to investigate the relationships among selected variables affecting decision-making in the functions of research university provosts. It was also designed to describe the importance of the variables with respect to the responses for field of study and age. The purpose of this chapter is to present an analysis of the data collected from the research university provosts.

Description of the Sample

This study yielded a response rate of 73% (47) with 55% (35) useable questionnaires of the total population of 64. One hundred percent of the provosts possessed earned doctoral degrees.

Tables 1 and 2 show the percentage of provosts' field of study and age range. The highest percentage (60%) of provosts had their formal preparation in the sciences. Their specializations included chemistry, brain science, nuclear physics, botany, biology, nutrition, and engineering. The humanities accounted for 29%, with concentrations in history, english, language, and literature. The remaining 11% had their formal preparation in educational areas.

The majority of the provosts (66%) fell within the 40-55 age range. The remaining 34% were in the 55 and above age range. There were no provosts in the 25-39 age range.

TABLE 1

DISTRIBUTION OF THE NUMBER AND PERCENTAGE OF PROVOSTS BY FIELD OF STUDY

Field of study	Number	Percentage
Educational areas	4	11
Humanities	10	29
Sciences	21	60

TABLE 2

DISTRIBUTION OF THE NUMBER AND PERCENTAGE OF PROVOSTS BY AGE

Age	Number	Percentage
25 - 39	0	0
40 - 55	23	66
55 and above	12	34

Research Question 1

Research question 1 asked: Are there relationships among the nine variables with respect to each of the 11 functions?

Tables 3-13 summarize the mean rating and standard deviations for each variable and the intercorrelations among the nine variables for each function, respectively. Each response is selected in the range 1 to 5. Correlation coefficients were calculated for the respondents' ratings on each of the 36 pairs of variables. Correlations significant at the .05 level are indicated with a single asterisk (*). A double asterisk (**) denotes a correlation coefficient that is significant at the .01 level.

Table 3 shows a summary of the data for function 1, general academic administration. A correlation coefficient of .37 between formal preparation and expectations of university groups was the only pair of variables that was significant at the .05 level.

The following pairs of variables had coefficients significant at the .01 level: philosophy of administration and formal preparation (.53), formal preparation with both requirements of the job description (.54) and length of time in position (.52). Requirements of the job description was also correlated with success in grants and endowments (.39), expectations of university groups (.47), and expectations of national education think tanks (.50). In addition to its correlation with requirements of the job description, success in grants and endowments was also significantly correlated with expectations of national education think tanks (.45).

Length of time in position was also significantly correlated with expectations of university groups (.35).

It is interesting to note that the most significant relationship was between experiences gained on the job and length of time in position (.58). This indicates that the longer research university provosts remain in their position the more experiences they gain to make more effective, efficient, meaningful, and productive decisions with respect to general academic administration.

Table 4 shows a summary of the data for function 2, academic budgeting. Correlation coefficients which were significant at the .05 level are as follows: philosophy of administration with both job description (.39) and grants and endowments (.36), formal preparation with job description (.38), job experience (.37), and time in position (.42). There were also significant correlations for expectations of university groups with both job description (.37) and needs of the university community (.43). Expectations of university groups was also correlated with expectations of national think tanks (.35).

The following pairs of variables had correlations that were significant at the .01 level. Requirements of the job description and expectations of national education think tanks (.48). Success in grants and endowments was significantly correlated with both expectations of university groups (.44) and expectations of national education think tanks (.64). Experiences gained on the job was moderately correlated with length of time in position (.50), and length of time in position was significantly correlated with needs of the university community (.53).

TABLE 3

MEAN RATING & INTERCORRELATION AMONG THE NINE FOR FUNCTION 1, GENERAL ACADEMIC ADMINISTRATION (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	4.40	0.77	-	.53**	.13	.21	.10	.29	.04	.01	-.02
2. Formal Prep	2.89	1.41		-	.54**	.25	.20	.52**	.31	.37*	.33
3. Job Descript	3.09	1.40			-	.39**	.23	.27	.28	.47**	.50**
4. Grant Success	3.00	1.08				-	.03	.26	.30	.08	.45**
5. Job Experience	4.40	0.88					-	.58**	.03	.21	.13
6. Time in Position	3.71	0.93						-	.27	.35**	.17
7. U. Comm Needs	4.09	0.82							-	.25	.21
8. Grps Expctns	3.77	0.97								-	.26
9. T Tanks Expctns	2.11	1.16									-

**P < 0.01, * P < 0.05.

TABLE 4

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 2, ACADEMIC BUDGETING (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	3.74	1.04	-	.25	.39*	.36*	.33	.32	.13	.15	.29
2. Formal Prep	3.20	1.32		-	.38*	-.07	.37*	.42*	.10	.09	-.05
3. Job Descript	3.09	1.42			-	.32	.33	.22	.14	.37*	.48**
4. Grant Success	3.09	1.15				-	.06	.06	.28	.44**	.64**
5. Job Experience	4.37	0.81					-	.50**	.27	.26	.24
6. Time in Position	3.63	0.94						-	.53**	.25	.20
7. U. Comm Needs	4.17	0.79							-	.43*	.33
8. Grps.Expctns	3.57	1.20								-	.35*
9. T Tanks Expctns	1.91	1.09									-

** P < 0.01, * P < 0.05.

The highest relationship was between success in grants and endowments and expectations of national education think tanks (.64). This suggests that the platforms and agendas of special interests education organizations may be responsible for the level of success in grants and endowments with respect to academic budgeting decisions.

Table 5 shows a summary of the data for function 3, academic personnel administration. Significant correlation coefficients at the .05 level were as follows: national think tanks with formal preparation (.35), job description (.38), grants and endowments (.36), and university groups (.38). In addition to national think tanks, formal preparation was also correlated with time in position (.34) and university groups (.34). Other significant correlations include philosophy of administration with job description (.40), and university groups with both time in position (.34) and university community (.41).

The following pairs of variables had coefficients significant at the .01 level: philosophy of administration and formal preparation (.46), experiences gained on the job and length of time in position (.43), and needs of the university community and expectations of national education think tanks (.59).

It is interesting to note that the highest relationship was between formal preparation and requirements of the job description. It may be reasoned that specifications contained in job requirements reflect the courses and other learning experiences involved in the formal preparation process with respect to decisions pertaining to academic personnel administration.

Table 6 shows a summary of the data for function 4, academic program administration. Pairs of variables with correlations significant at the .05 level were as follows: philosophy of administration with both formal preparation (.37) and time in position (.34), national think tanks with both formal preparation (.40) and university groups (.38), and university community with university groups (.40).

Pairs of variables with correlation coefficients significant at the .01 level are as follows: formal preparation with both length of time in position (.52) and expectations of university groups, and requirements of the job description with both expectations of university groups (.56) and expectations of national education think tanks (.50). The two highest relationships were between formal preparation and requirements of the job description (.67), and between experiences gained on the job and length of time in position (.66). This suggests that experiences gained through extensive periods of time in the position coupled with requirements of the job description as a result of formal preparation programs may affect decision-making within academic program administration.

Table 7 shows a summary for function 5, academic freedom administration. Coefficient correlation significant at the .05 level include the following: university community with both philosophy of administration (.40) and success in grants and endowments (.41), expectations of think tanks with both time in position (.40) and university community (.39), and grants and endowments with job experience (.40). There were also positive correlations for job description with grants and endowments (.42), job experience (.36), and time in position (.35).

TABLE 5

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 3, ACADEMIC PERSONNEL ADMINISTRATION

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	4.00	0.94	-	.46**	.40*	-.10	.33	.28	.22	.10	.13
2. Formal Prep	2.83	1.36		-	.67**	.14	.22	.34*	.32	.34*	.35*
3. Job Descript	3.09	1.31			-	.12	.16	.18	.39*	.39*	.38*
4. Grant Success	2.17	1.20				-	.07	.03	.23	.11	.36*
5. Job Experience	4.29	0.86					-	.43**	-.07	.12	.15
6. Time in Position	3.63	1.00						-	.19	.34*	.28
7. U. Comm Needs	3.97	0.86							-	.41*	.59**
8. Grps Expctns	3.46	0.95								-	.38*
9. T Tanks Expctns	1.89	1.21									-

** P < 0.01, * P < 0.05.

TABLE 6

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 4, ACADEMIC PROGRAM ADMINISTRATION (N=35)

Variables	Mean		1	2	3	4	5	6	7	8	9
1. Philos of Admin	4.09	0.82	-	.37*	.31	.06	.26	.34*	.21	.19	.28
2. Formal Prep	3.23	1.50		-	.67**	.16	.16	.52**	.10	.45**	.40*
3. Job Descript	3.09	1.38			-	.32	.15	.25	.10	.56**	.50**
4. Grant Success	3.06	1.06				-	.29	.21	.10	.24	.47
5. Job Experience	4.02	0.95					-	.66**	.26	.26	.17
6. Time in Position	3.50	0.92						-	.26	.30	.28
7. U. Comm Needs	4.09	0.82							-	.40*	.08
8. Grps Expctns	3.60	1.01								-	.38*
9. T Tanks Expctns	2.14	1.22									-

** P < 0.01, * P < 0.05.

Pairs of variables with correlations significant at the .01 level are as follows: philosophy of administration with both formal preparation (.45) and requirements of the job description (.44), needs of the university community and expectations of university groups (.70), and success in grants and endowments and expectations of national education "think tanks" (.45).

In addition to needs of the university community (.48), expectations of university groups was also significantly correlated with length of time in position (.54), experiences gained on the job (.55), requirements of the job description (.52), and formal preparation (.49). Formal preparation was significantly correlated with requirements of the job description (.58), success in grants and endowments (.50), experiences gained on the job (.60), needs of the university community (.50), and expectations of national education think tanks (.47). There was also a significant correlation between requirements of the job description and both needs of the university community (.53) and expectations of national education "think tanks" (.52). Again, the highest relationship was between experiences gained on the job and length of time in position (.76) indicating the importance of experiences gained as a result of length of time in position to academic freedom decision-making.

TABLE 7

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES
FOR FUNCTION 5, ACADEMIC FREEDOM ADMINISTRATION (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	4.06	1.14	-	.45**	.21	.10	.44**	.29	.40*	.54**	.26
2. Formal Prep	2.46	1.31		-	.58**	.50**	.53**	.60**	.50**	.49**	.47**
3. Job Descript	2.37	1.24			-	.42*	.36*	.35*	.53**	.52**	.52**
4. Grant Success	1.89	1.11				-	.40*	.44**	.41*	.29	.45**
5. Job Experience	3.23	1.33					-	.76**	.48**	.55**	.28
6. Time in Position	2.86	1.29						-	.48**	.54**	.40*
7. U. Comm Needs	3.31	1.25							-	.70**	.39*
8. Grps Expctns	3.40	1.35								-	.46**
9. T Tanks Expctns	2.11	1.25									-

** P < 0.01, * P < 0.05.

TABLE 8

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 6, STUDENT RECRUITMENT ADMINISTRATION (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	3.29	1.10	-	.63**	.45**	.18	.54**	.38*	.28	.47**	.29
2. Formal Prep	2.51	1.27		-	.67**	.29	.43**	.58**	.27	.40*	.26
3. Job Descript	2.74	1.17			-	-.02	.36*	.34*	.20	.37*	.15
4. Grant Success	1.86	1.05				-	.25	.33	.32	.24	.42*
5. Job Experience	3.60	1.14					-	.60**	.34*	.45**	.18
6. Time in Position	3.00	1.11						-	.43**	.36*	.18
7. U. Comm Needs	3.71	1.05							-	.61**	.22
8. Grps Expctns	3.26	1.17								-	.36*
9. T Tanks Expctns	1.80	1.02									-

** P < 0.01, * P < 0.05.

Table 8 shows a summary of the data for function 6, student recruitment administration. Pairs of variables with significant correlation coefficients at the .05 level are: time in position with both philosophy of administration (.38) and job description (.34), national think tanks with both university groups (.36) and grants and endowments (.42), and university community with job experience (.34). There were also significant correlations for university groups with time in position (.36), job description (.37), and formal preparation (.40). Job description also showed a positive correlation with job experience.

The following pairs of variables had correlation coefficients significant at the .01 level: philosophy of administration with formal preparation (.63), requirements of the job description (.45), experiences gained on the job (.54), and expectations of university groups (.47). Formal preparation had a positive correlation with experiences gained on the job (.43) and length of time in position (.58). Expectations of university groups also showed a positive correlation with experiences gained on the job (.45) and needs of the university community (.61). In addition to expectations of university groups needs of the university community showed a positive correlation with length of time in position (.43). The highest relationship was between formal preparation and requirements of the job description (.67). Overall, philosophy of administration, formal preparation, and experiences gained on the job tend to relate significantly with other variables with respect to student recruitment administration decision-making.

Table 9 shows a summary for function 7, academic records administration. Correlation coefficients significant at the 0.5 level were found for the following pairs of variables: job experience with both job description (.34) and grants and endowments (.35), and university groups with national think tanks (.37). Significant correlations also existed for university groups with philosophy of administration (.39), job experience (.40), and university community (.37).

The following pairs of variables had significant correlation coefficients at the .01 level: formal preparation with requirements of the job description (.66), experiences gained on the job (.46), and length of time in position (.44). There was also a significant correlation between success in grants and endowments and expectations of national education think tanks (.54). The highest relationship was between experiences gained on the job and length of time in position (.67). The importance of experience as it relates to time in position suggests a very good possibility for sound decision-making with respect to academic records administration.

Table 10 shows a summary for function 8, academic facilities administration. Correlation coefficients which were significant at the .05 level include job experience and time in position with formal preparation (.39, .34) and job description (.34, .36) respectively, and university community with grants and endowments (.34). In addition to a relationship with formal preparation (.35) philosophy of administration also displayed a relationship with university groups (.34). Job description correlated significantly with university groups (.41).

The following pairs of variables had significant correlation coefficients at the .01 level: philosophy of administration and needs of the university community (.48), and needs of the university community with expectations of university groups (.56). The highest relationships were between formal preparation and requirements of the job description (.57) and between experiences gained on the job and length of time in position. Philosophy of administration may either shape or be shaped by community needs and experiences.

Table 11 shows a summary of the data for function 9, state education liaison. A correlation coefficient of .43 between formal preparation and grants and endowments was the only significant correlation at the .05 level.

Pairs of variables with significant correlations at the .01 level are as follows: philosophy of administration is positively correlated with formal preparation (.72), requirements of the job description (.58), success in grants and endowments (.44), experiences gained on the job (.66), needs of the university community (.67), expectations of university groups (.64), and expectations of national education think tanks (.50). There were also significant correlations between formal preparation (.75), experiences gained on the job (.72), needs of the university community (.49), as well as expectations of university groups (.56), and expectations of national education think tanks (.43).

Expectations of national education think tanks was also significantly correlated with university groups (.61), university community (.54), job experience (.57), grants and endowments (.46), and job description (.46). Significant

correlations also existed between job description and grants and endowments (.49), job experience (.75), university community (.60), and university groups (.68). Success in grants and endowments had significant correlations with job experience (.46), university community (.53), and university groups (.56). Job experience was correlated with both university community (.61) and university groups (.59). The highest relationship was between needs of the university community and expectations of university groups (.78). Success in state education liaison may be affected by the needs and philosophies of special interest groups and their attached agendas.

Table 12 shows a summary for function 10, public relations. Correlation coefficients which were significant at the .05 level were found for the following: philosophy of administration with job experience (.41), university community (.41), and university groups (.35); think tanks with both grants and endowments (.34) and time in position (.37); and university groups with both job experience (.35) and time in position (.34).

The following pairs of variables had coefficients with significance at the .01 level: philosophy of administration and formal preparation (.56), job description and job experience (.34), and time in position and university community (.44). University groups was also highly correlated with university community (.57) and job description (.41). Again, the highest relationship was between job experience and time in position. The constant reoccurrence of this relationship indicates the impact of exchange that each variable has with each other.

TABLE 9

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 7, ACADEMIC RECORDS ADMINISTRATION (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos Admin	2.77	0.94	-	.29	.15	.29	.29	.28	.15	.39*	.13
2. Formal Prep	2.46	1.27		-	.66**	.27	.46**	.44**	-.02	.23	.08
3. Job Descript	2.46	1.15			-	.14	.34*	.27	.06	.31	.15
4. Grant Success	1.74	0.95				-	.35*	.22	-.12	.12	.54**
5. Job Experience	3.40	1.19					-	.67**	.31	.40*	.27
6. Time in Position	2.94	1.06						-	.07	.17	.21
7. U. Comm. Needs	3.17	0.92							-	.37*	-.12
8. Grps Expctns	2.77	1.06								-	.37*
9. T Tanks Expctns	1.40	0.77									-

** P < 0.01, *P < 0.05.

TABLE 10

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 8, ACADEMIC FACILITIES ADMINISTRATION (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	2.91	0.95	-	.35*	.18	.23	.15	.22	.48**	.34*	.15
2. Formal Prep	2.66	1.43		-	.57**	.07	.39*	.34*	.11	.28	-.01
3. Job Descript	2.60	1.14			-	.19	.34*	.36*	.21	.41*	.19
4. Grant Success	2.71	1.10				-	-.03	.02	.34*	.31	.20
5. Job Experience	3.69	1.02					-	.57**	.26	.16	.11
6. Time in Position	3.09	1.01						-	.29	.25	.20
7. U. Comm. Needs	3.80	0.87							-	.56**	.20
8. Grps Expctns	3.49	1.12								-	.31
9. T Tanks Expctns	1.51	0.95									-

** P < 0.01, * P < 0.05.

Table 13 shows a summary of data for function 11, fund raising. A correlation coefficient of .42 between university community and university groups was significant at the .05 level. Other significant pairs of variables at the .05 level include: time in position with both university community (.35) and university groups (.39), and job description with both grants and endowments (.36) and time in position (.39).

The following pairs of variables had coefficients with significance at the .01 level: philosophy of administration with both formal preparation (.52) and university groups (.53). Formal preparation was positively correlated with job description (.60), job experience (.44), and time in position (.50). There was also a significant correlation for job description with both job experience (.43) and university groups (.47). It is again interesting to note that the highest relationship was between job experience and time in position.

Summary of Findings for Research Question 1

There were relationships among the nine variables with respect to the functions. All significant pairs of variables were positively correlated. Variables with the most frequent significant correlations among themselves are as follows: formal preparation with requirements of the job description (11 times), experiences gained on the job with length of time in position (10 times), requirements of the job description with expectations of university groups (10

TABLE 11

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES
FOR FUNCTION 9, STATE EDUCATION LIAISON (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	2.89	1.55	-	.72**	.58**	.44**	.66**	-.03	.67**	.64**	.50**
2. Formal Prep	2.06	1.45		-	.75**	.43*	.72**	.18	.49**	.56**	.43**
3. Job Descript	2.11	1.37			-	.49**	.75**	.02	.60**	.68**	.46**
4. Grant Success	1.91	1.29				-	.46**	-.14	.53**	.56**	.46**
5. Job Experience	3.09	1.69					-	.14	.61**	.59**	.57**
6. Time in Position	3.00	1.11						-	-.11	-.17	.04
7. U. Comm. Needs	3.00	1.50							-	.78**	.54**
8. Grps Expctns	2.63	1.54								-	.61**
9. T Tanks Expctns	1.86	1.42									-

** P < 0.01, * P < 0.05.

TABLE 12

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES
FOR TO FUNCTION 10, PUBLIC RELATIONS (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	3.60	1.01	-	.56**	.21	-.19	.41*	.30	.41*	.35*	.16
2. Formal Prep	2.63	1.24		-	.63**	.00	.47**	.32	.18	.30	.25
3. Job Descript	2.74	1.20			-	.02	.34**	.32	.12	.41**	.22
4. Grant Success	2.54	1.12				-	-.02	-.10	-.01	.18	.34*
5. Job Experience	3.83	1.04					-	.70**	.16	.35*	.30
6. Time in Position	3.14	1.09						-	.44**	.34*	.37*
7. U. Comm Needs	3.80	0.87							-	.57**	.05
8. Grps Expctns	3.43	1.01								-	.27
9. T Tanks Expctns	2.11	1.21									-

** P < 0.01, * P < 0.05.

TABLE 13

MEAN RATING & INTERCORRELATION AMONG THE NINE VARIABLES FOR FUNCTION 11, FUND RAISING (N=35)

Variables	Mean	Std	1	2	3	4	5	6	7	8	9
1. Philos of Admin	3.51	1.27	-	.52**	.29	.05	.27	.31	.15	.53**	.30
2. Formal Prep	2.63	1.29		-	.60**	.23	.44**	.50**	.17	.32	.09
3. Job Descript	2.89	1.28			-	.36*	.43**	.39*	.11	.47**	.19
4. Grant Success	4.09	1.09				-	.23	.24	.22	.29	.21
5. Job Experience	4.14	0.88					-	.72**	.24	.29	.21
6. Time in Position	3.51	0.95						-	.35*	.39*	.26
7. U. Comm Needs	4.06	1.06							-	.42*	.11
8. Grps Expctns	3.66	1.11								-	.31
9. T Tanks Expctns	1.94	1.30									-

** P < 0.01, * P < 0.05.

times), formal preparation with length of time in position (9 times), philosophy of administration with formal preparation (9 times), and needs of the university community with expectations of university groups (9 times).

Variables with the most frequent correlations among other variables are as follows: expectations of university groups (53 times), requirements of the job description (52 times), and formal preparation (51 times). Success in grants and endowments (25 times) had the least number of significant correlations with all the variables.

There were significant correlations between experiences gained on the job and length of time in position for all variables with the exception of state education liaison, and between needs of the university community and expectations of university groups with respect to state education liaison and general academic administration.

Research Question 2

Research question 2 stated: Are there significant differences among the variables with respect to their importance to decision-making for each function?

For each of the functions One-way Repeated Measures Analysis of Variance was performed among the nine variables. Details of this procedure are shown in Tables 28 to 38 of Appendix F. A summary of this data is presented in Table 14. The F ratio and their associated probabilities show that there were significant differences among the variables with respect to their importance to decision-making for each of the 11 functions.

The Student-Newman-Keuls Multiple Comparison Procedure was then used to determine exactly which variables differ from each other.

The summarized data in Table 15 reveals that the mean score of the variables with respect to their importance to decision-making relative to function 1, general academic administration ranges from a hardly important low of 2.11 for expectations of national education think tanks to an important high of 4.40 for both philosophy of administration and experiences gained on the job. Variables above the set 3.50 (important) mean value had significantly different means than those in the other ranges at the .05 level. Philosophy of administration was significantly higher in importance than all other variables with the exception of job experience.

This indicates that as provosts serve as principal officer of the university and administer the various colleges, special units and academic support facilities their decision-making is affected by their philosophy of administration (4.40), job experiences (4.40), needs of the university community (4.09), expectations of university groups (3.77), and length of time in position (3.71). This establishes the fact that general academic administration is dynamic and constantly changing and is affected by different variables in the environment. Expectations of national education think tanks were hardly important to decision-making within general academic administration.

The summarized data in Table 16 reveals that the mean scores of the variables with respect to decision-making relative to function 2, academic

TABLE 14

SUMMARY OF REPEATED ANALYSIS OF VARIANCE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO THE FUNCTIONS

Functions		F*	Prob
1.	Academic Administration	25.31	0.00
2.	Academic Budgeting	20.52	0.00
3.	Personnel Administration	27.76	0.00
4.	Program Administration	16.63	0.00
5.	Academic Freedom	20.10	0.00
6.	Student Recruitment	20.87	0.00
7.	Records Administration	18.31	0.00
8.	Facilities Administration	19.62	0.00
9.	State Liaison	8.45	0.00
10.	Public Relations	15.08	0.00
11.	Fund Raising	21.33	0.00

*Degrees of Freedom are 8 and 27 for the F ratio for each role/function.

budgeting range from a hardly important low of 1.91 for expectations of national education think tanks to an important high of 4.37 for experiences gained on the job. Needs of the university community (4.17) and job experience were significantly higher in importance than all other variables. Experiences based on university community needs and, moreover, job situations with respect to appropriation, control, demand, service and the ability to assemble and administer the academic budget affect the way in which academic budgeting decisions are made. Other important variables were philosophy of administration (3.74), length of time in position (3.63), and expectations of university groups (3.57).

The summarized data in Table 17 reveals that the mean scores of the variables with respect to their importance to decision-making relative to function 3, academic personnel administration range from a hardly important low of 1.89 for national think tanks to an important high of 4.29 for job experience. It is logical to understand that when provosts deal with procedures for faculty appointments, terminations, salaries, promotions, working conditions, and tenure they rely heavily on experiences gained on the job, philosophy of administration (4.00), and needs of the university community (3.97). These variables were significantly different from length of time in position (3.63) and even university groups (3.46), and more highly different from job description (3.09) and formal preparation (2.83). Success in grants and endowments (2.17) and expectations of national education think tanks were hardly important importance to decision-making within academic personnel administration.

The summarized data in Table 18 reveals that the mean scores of the variables with respect to their importance to decision-making relative to function 4, academic program administration range from a hardly important low of 2.14 for national education think tanks to an important high of 4.09 for both philosophy of administration and needs of the university community. Job experience (4.03) was also an important contributor to decision-making within this function. These variables were significantly different from university groups (3.60), time in position (3.46), formal preparation (3.23), job description (3.09), and grants and endowments (3.06).

Developing new programs and keeping existing programs updated and in conformity with university education policies is influenced or affected by the current and future needs of the university community and administrative philosophy. Expectations of national education think tanks was of little or no importance to decision-making within academic program administration.

The summarized data in Table 19 indicates that the mean score of the variables with respect to their importance to decision-making relative to function 5, academic freedom administration range from a hardly important low of 1.89 for grants and endowments to an important high of 4.06 for philosophy of administration. Provosts ensure that academic procedures preserve academic freedom and ensure academic responsibility based primarily on administrative philosophy. Philosophy of administration differs significantly from expectations of university groups (3.40), needs of the university community (3.31), experiences

TABLE 15

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 1, GENERAL ACADEMIC ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	9	2	4	3	6	8	7	1	5
9. Education "think tanks"	2.11	1.16									
2. Formal preparation	2.89	1.41	*								
4. Grants and endowments	3.00	1.08	*								
3. Job description	3.09	1.40	*								
6. Time in position	3.71	0.93	*	*	*	*					
8. University groups	3.77	0.97	*	*	*	*					
7. University community	4.09	0.82	*	*	*	*					
1. Philosophy of administration	4.40	0.77	*	*	*	*	*	*			
5. Job experience	4.40	0.88	*	*	*	*					

Note. N=35.
*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 16

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 2, ACADEMIC BUDGETING ADMINISTRATION

			Variables
Variables	Mean	Std Dev	9 3 4 2 8 6 1 7 5
9. Education "think tanks"	1.91	1.09	
3. Job description	3.09	1.42	*
4. Grants and endowments	3.09	1.15	*
2. Formal preparation	3.20	1.32	*
8. University groups	3.57	1.20	*
6. Time in position	3.63	0.94	*
1. Philosophy of administration	3.74	1.04	*
7. University community	4.17	0.79	* * * *
5. Job experience	4.37	0.81	* * * * * * *

Note. N=35.
*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 17

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 3, ACADEMIC PERSONNEL ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	9	4	2	3	8	6	7	1	5
9. National "think tanks"	1.89	1.21									
4. Grants and endowments	2.17	1.20									
2. Formal preparation	2.83	1.36	*	*							
3. Job description	3.09	1.31	*	*							
8. University groups	3.46	0.95	*	*	*						
6. Time in position	3.63	1.00	*	*	*						
7. University community	3.97	0.86	*	*	*	*					
1. Philosophy of administration	4.00	0.94	*	*	*	*					
5. Job experience	4.29	0.86	*	*	*	*	*				

Note. N=35.

*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 18

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 4, ACADEMIC PROGRAM ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	9	4	3	2	6	8	5	1	7
9. National "think tanks"	2.14	1.22									
4. Grants and endowments	3.06	1.06	*								
3. Job description	3.09	1.38	*								
2. Formal preparation	3.23	1.50	*								
6. Time in position	3.46	0.92	*								
8. University groups	3.60	1.01	*								
5. Job experience	4.03	0.95	*	*	*	*					
1. Philosophy of administration	4.09	0.82	*	*	*	*					
7. University community	4.09	0.82	*	*	*	*					

Note. N=35.
*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 19

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 5, ACADEMIC FREEDOM ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	4	9	3	2	6	5	7	8	1
4. Grants and endowments	1.89	1.11									
9. National "think tanks"	2.11	1.25									
3. Job description	2.37	1.24									
2. Formal preparation	2.46	1.31									
6. Time in position	2.86	1.29	*								
5. Job experience	3.23	1.33	*	*	*	*					
7. University community	3.31	1.25	*	*	*	*					
8. University groups	3.40	1.35	*	*	*	*					
1. Philosophy of administration	4.06	1.14	*	*	*	*	*	*	*	*	

Note. N=35.

*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 20

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 6, STUDENT RECRUITMENT ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	9	4	2	3	6	8	1	5	7
9. National "think tanks"	1.80	1.02									
4. Grants and endowments	1.89	1.05									
2. Formal preparation	2.51	1.27	*	*							
3. Job description	2.74	1.17	*	*							
6. Time in position	3.00	1.11	*	*							
8. University groups	3.26	1.17	*	*	*						
1. Philosophy of administration	3.30	1.10	*	*	*						
5. Job experience	3.60	1.14	*	*	*	*					
7. University community	3.71	1.05	*	*	*	*					

Note. N=35.
*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 21

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 7, ACADEMIC RECORDS ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	9	4	2	3	1	8	6	7	5
9. National "think tanks"	1.40	0.77									
4. Grants and endowments	1.74	0.95									
2. Formal preparation	2.46	1.27	*	*							
3. Job description	2.46	1.14	*	*							
1. Philosophy of administration	2.77	0.94	*	*							
8. University groups	2.77	1.06	*	*							
6. Time in position	2.94	1.06	*	*							
7. University community	3.17	0.92	*	*		*					
5. Job experience	3.40	1.19	*	*	*	*					

Note. N=35.

*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 22

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 8, ACADEMIC FACILITIES ADMINISTRATION

			Variables								
Variables	Mean	Std Dev	9	3	2	4	1	6	8	5	7
9. National "think Tanks"	1.51	0.95									
3. Job description	2.60	1.14	*								
2. Formal preparation	2.69	1.43	*								
4. Grants and endowments	2.71	1.10	*								
1. Philosophy of administration	2.91	0.95	*								
6. Time in position	3.09	1.01	*								
8. University groups	3.49	1.12	*	*	*	*					
5. Job experience	3.69	1.02	*	*	*	*	*				
7. University community	3.80	0.87	*	*	*	*	*	*			

Note. N=35.

*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 23

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 9, STATE EDUCATION LIAISON

			Variables
Variables	Mean	Std Dev	9 4 2 3 6 8 1 7 5
9. National "think tanks"	1.85	1.42	
4. Grants and endowments	1.91	1.29	
2. Formal preparation	2.06	1.45	
3. Job description	2.11	1.37	
6. Time in position	2.60	1.46	
8. University groups	2.63	1.54	
1. Philosophy of administration	2.89	1.55	
7. University community	3.00	1.50	* *
5. Job experience	3.09	1.69	* *

Note. N=35.
*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 24

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 10, PUBLIC RELATIONS

			Variables								
Variables	Mean	Std Dev	9	4	2	3	6	8	1	7	5
9. National "think tanks"	2.11	1.21									
4. Grants and endowments	2.54	1.12									
2. Formal preparation	2.63	1.23									
3. Job description	2.74	1.20									
6. Time in position	3.14	1.09	*								
8. University groups	3.43	1.01	*	*	*	*					
1. Philosophy of administration	3.60	1.01	*	*	*	*					
7. University community	3.80	0.87	*	*	*	*					
5. Job experience	3.83	1.04	*	*	*	*					

Note. N=35

*Denotes pairs of internal/external variables significantly different at the .05 level.

TABLE 25

STUDENT-NEWMAN-KEULS PROCEDURE FOR SIGNIFICANTLY DIFFERENT VARIABLES RELATIVE TO FUNCTION 11, FUND RAISING

			Variables								
Variables	Mean	Std Dev	9	2	3	1	6	8	7	4	5
9. National "think tanks"	1.94	1.30									
2. Formal preparation	2.63	1.29	*								
3. Job description	2.89	1.28	*								
1. Philosophy of administration	3.51	1.27	*	*	*						
6. Time in position	3.51	0.95	*	*							
8. University groups	3.66	1.11	*	*	*						
7. University community	4.06	1.06	*	*	*						
4. Grants and endowments	4.09	1.09	*	*	*						
5. Job experience	4.14	0.88	*	*	*						

Note. N=35

*Denotes pairs of internal/external variables significantly different at the .05 level.

gained on the job (3.23), and length of time in position (2.86). Of hardly any importance were formal preparation (2.46), requirements of the job description (2.37), expectations of national education think tanks (2.11), and success in grants and endowments (1.89).

The summarized data in Table 20 reveals that the mean score of the variables with respect to their importance to decision-making relative to function 6, student recruitment administration range from a hardly important low of 1.80 for national think tanks to an important high of 3.71 for needs of the university community. As the provosts make decisions concerning procedures and policies related to the admission of students, and liaise with high school and community colleges, they also relied on experiences gained on the job (3.60). These two variables were significantly different from philosophy of administration (3.30), expectations of university groups (3.26), and length of time in position (3.00) which were different from requirements of the job description (2.74), and formal preparation (2.51). Again, success in grants and endowments (1.89) and expectations of national education think tanks were hardly important to decision-making within student recruitment administration.

The summarized data in Table 21 indicates that the mean scores of the variables with respect to their importance to decision-making relative to function 7, academic records administration range from a not important low of 1.40 for national education think tanks to an average importance high of 3.40 for experiences gained on the job. Needs of the university community (3.17) also

displayed average importance. Other variables of average importance to registration, orientation, certification, and the organization and maintenance of permanent student records were needs of the university community (3.17), length of time in position (2.94), expectations of university groups (2.77), and philosophy of administration (2.77). These are, however, significantly different from university community and job experience. Requirements of the job description (2.46), formal preparation (2.46), and success in grants and endowments (1.74) were hardly important. Expectations of national education think tanks was not important to decision-making within academic records administration.

The summarized data in Table 22 reveals that the mean scores of the variables with respect to their importance to decision-making relative to function 8, academic facilities administration range from a hardly important low of 1.51 for national education think tanks to an important high of 3.80 for needs of the university community. Decisions related to the administration of academic facilities and support units such as libraries and computer laboratories were also influenced or affected by experiences gained on the job (3.69) and expectations of university groups (3.49). Of average importance yet significantly different from the above were length of time in position (3.09), philosophy of administration (2.91), success in grants and endowments (2.71), formal preparation (2.69), and requirements of the job description (2.60). Expectations of national education think tanks was of little or no importance to decision-making within academic facilities administration.

The summarized data in Table 23 shows that the mean scores of the variables with respect to their importance to decision-making relative to function 9, state education liaison range from a hardly important low of 1.85 for national think tanks to an importance high of 3.09 for experiences gained on the job. Other average important variables that were significantly different from university community (3.00) and job experience were philosophy of administration (2.89), expectations of university groups (2.63), and length of time in position. Requirements of the job description (2.11), formal preparation (2.06), success in grants and endowments (1.91), and expectations of national education think tanks were hardly important to decision-making within state education liaison.

The summarized data in Table 24 reveals that the mean scores of the variables with respect to their importance to decision-making relative to function 10, public relations range from a hardly important low of 2.11 for national education think tanks to an important high of 3.83 for experiences gained on the job. As provost build a strong public image for the university they also viewed needs of the university community (3.80) and philosophy of administration (3.60) as important. Of average importance and significantly different from job experience, university community, and philosophy of administration were expectations of university groups (3.43), length of time in position (3.14), requirements of the job description (2.74), formal preparation (2.63), and success in grants and endowments (2.54). Expectations of national education think tanks was of little or no importance to decision-making within public relations.

The summarized data in Table 25 indicates that the mean scores of the variables with respect to their importance to decision-making relative to function 11, fund raising range from a hardly important low of 1.94 for national education think tanks to an important high of 4.14 for experiences gained on the job. The ability of the provost to secure funds for research and development was also influenced by success in grants and endowments (4.09), needs of the university community (4.06), expectations of university groups (3.66) length of time in position (3.51), and philosophy of administration (3.51). Requirements of the job description (2.89) and formal preparation (2.63) were of average importance and significantly different from the forgoing variables. Expectations of national education think tanks was hardly important to decision-making within fund raising.

Summary of Findings for Research Question 2

For purposes of interpretation a mean value of 4.50 and above is considered extremely important, 4.50 to 3.50 is considered important, 3.50 to 2.50 is considered average, 2.50 to 1.50 is considered hardly important, and 1.50 to 1.00 is considered not important. Table 26 summarizes the importance of each variable with respect to each function.

There were differences among the variables relative to their importance to decision-making with respect to the functions. Variables were significantly more important for the following functions: fund raising (6 variables), general academic administration (5 variables), academic budgeting (5 variables), academic personnel administration (4 variables), academic program administration (4 variables), and

public relations (4 variables). The three most important variables that influenced decision-making with respect to the functions are experiences gained on the job (8 functions), needs of the university community (8 functions), and philosophy of administration (7 functions).

Provosts appear to have little or no regard for the agendas or platforms of national education think tanks, formal preparation, requirements of the job description, and success in grants and endowments. The following functions were generally regarded as being not important: state education liaison, academic records administration, and academic freedom administration.

Research Question 3

Research question 3 stated: Are there differences among the responses of the provosts with respect to the importance of the variables due to field of study and age?

Tables 40-61 (see Appendix F) show the mean and standard deviation for each function relative to the relationship of the responses of the provosts to the importance of any variable with respect to fields of study and age range. Tables 27 and 28 show the multivariate analysis of variance results for fields of study and age groups respectively.

Table 27 shows that all the probabilities associated with the F ratios are greater than .05. Thus, there were no significant differences between the responses (with respect to the importance of the nine variables to decision-making for each function) of the two age groups. A similar result was obtained

TABLE 26

IMPORTANCE OF VARIABLES TO DECISION-MAKING FOR EACH FUNCTION

	Variables								
Functions	Philo.	Formal prep.	Job desc.	Grants	Job exp.	Time	U.Needs	G.Expect	TT expect
Acad. Admin.	I				I	I	I	I	u
Acad. Budget	I				I	I	I	I	u
Pers. Admin.	I			u	I	I	I		u
Prog. Admin.	I				I		I	I	u
Acad. Freedom	I	u	u	u					u
Stu. Recruit				u	I		I		u
Records Admin.		u	u	u					u
Facil. Admin.					I		I		u
State Liaison		u	u	u					u
Public Relations	I				I		I		u
Fund Raising	I			I	I	I	I	I	u

KEY: I = important; u = not important.

TABLE 27

MULTIVARIATE ANALYSIS OF VARIANCE
FOR PROVOSTS' AGE RANGE

	Functions	Hotellings'-T	F*	Prob
1.	Academic Administration	0.41	1.14	0.37
2.	Academic Budgeting	0.17	0.47	0.88
3.	Personnel Administration	0.17	0.48	0.87
4.	Program Administration	0.25	0.69	0.71
5.	Academic Freedom	0.29	0.82	0.61
6.	Student Recruitment	0.16	0.44	0.90
7.	Records Administration	0.24	0.68	0.72
8.	Facilities Administration	0.45	1.25	0.31
9.	State Liaison	0.26	0.74	0.67
10.	Public Relations	0.26	0.72	0.68
11.	Fund Raising	0.33	0.92	0.53

*Degrees of Freedom are 9 and 25 for the F ratio for each role/function.

TABLE 28

MULTIVARIATE ANALYSIS OF VARIANCE
FOR PROVOSTS' FIELDS OF STUDY

	Functions	Hotellings'-T	F*	Prob
1.	Academic Administration	0.66	0.85	0.63
2.	Academic Budgeting	0.82	1.03	0.44
3.	Personnel Administration	0.86	1.15	0.34
4.	Program Administration	0.86	1.10	0.41
5.	Academic Freedom	0.51	0.66	0.83
6.	Student Recruitment	0.49	0.64	0.85
7.	Records Administration	0.06	1.32	0.22
8.	Facilities Administration	0.73	0.92	0.56
9.	State Liaison	1.29	1.54	0.12
10.	Public Relations	0.66	0.81	0.68
11.	Fund Raising	0.76	0.94	0.54

* Degrees of Freedom are 9 and 25 for the F ratio for each role/function.

for field of study (see Table 28). That is, there were no significant differences among the responses (with respect to the importance of the nine variables to decision-making for each function) for the three fields of study (sciences, humanities, educational areas).

Summary of Findings

All research university provosts possessed extremely high educational qualifications. They all held earned doctorates, with the majority being in the sciences. There were more provosts with formal preparation in the humanities than in the educational fields. A significant number of provosts fell within the 40-54 age range with far fewer within the 55 and above age range. There were no provost in the 25-39 age range.

There were relationships among the nine variables with respect to the 11 functions. All significant correlations were positively correlated. Variables with the most frequent correlations among themselves as well as among the other variables are as follows: formal preparation with requirements of the job description (11 times), experiences gained on the job with length of time in position (10 times), requirements of the job description with expectations of university groups (10 times), formal preparation with length of time in position (9 times), philosophy of administration with formal preparation (9 times), and needs of the university community with expectations of university groups (9 times).

There were significant correlations between experiences gained on the job and length of time in position for all variables with the exception of state

education liaison, and between needs of the university community and expectations of university groups with respect to state education liaison and general academic administration.

There were differences among the variables relative to their importance to decision making with respect to the functions. Variables were significantly more important for the following functions: fund raising (6 variables), general academic administration (5 variables), academic budgeting (5 variables), academic personnel administration (4 variables), academic program administration (4 variables), and public relations (4 variables). The three most important variables that influenced decision-making with respect to the functions are experiences gained on the job (8 functions), needs of the university community (8 functions), and philosophy of administration (7 functions).

Provosts appear to have little or no regard for the agendas or platforms of national education think tanks, formal preparation, requirements of the job description, and success in grants and endowments. The following functions were generally regarded as being not important: state education liaison, academic records administration, and academic freedom administration. Responses of the provosts with respect to the importance of the variables did not differ regardless of their field of study and age.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to investigate the relationships among selected variables as they influence decision-making in the functions of research university provosts. This chapter is a summary of the present study, a discussion of the findings from the results of the study, a conclusion, and recommendations for practice and further study.

Summary

This study employed the survey research method to investigate the relationships among selected variables affecting decision-making in various functions. A demographic questionnaire and a modified instrument used by Lashley (1981) were mailed to research university provosts. The data collected was also used to examine the relationships between the variables and the provosts' educational background, field of study, and age.

The precise purpose was to describe and examine (1) the relationships among the variables with respect to the functions; (2) the differences among the variables with respect to their importance to decision-making relative to the

functions; and (3) the differences among the responses of the provosts with respect to the importance of the variables for field of study and age.

The literature review focused on related research which had been undertaken with respect to the development of the research university provostship, decision making in educational administration, and the effects of the environment on demeanor or behavior. The areas explored fell into nine sections: historical evolution and nature of the research university, development of the provostship, the function of the research university provost, provost as principal academic officer, office of the provost, studies on the functions of the research university provost, decision making in educational administration, rationale supporting the selection of an internal/external dimension, and the relationship between environment and demeanor which provided the theoretical framework.

The population for this study consisted of research university provosts in six nationwide geographical regions. The basic source of the relationship among selected variables affecting decision making in the functions of research university provosts was provided by an instrument developed for this purpose. A demographic questionnaire was also developed to determine personal information for each provost surveyed in terms of educational qualification, field of study, and age. The Statistical Analysis System (SAS) (Statistical Analysis System Inc., 1990) was used for analyzing the data. The data were analyzed using descriptive statistics—Pearson's Product-Moment Correlation Coefficient (Pearson's r), Simple Repeated Measures Analysis of Variance, and Multivariate Analysis of Variance.

The Pearson's Product-Moment correlation coefficient was used to measure the relationships among the variables with respect to each of the functions.

The summarized data revealed that there were relationships among the nine variables with respect to the functions. Variables with the most frequent significant correlations among themselves as well as among the other variables are as follows: formal preparation with requirements of the job description (11 times), experiences gained on the job with length of time in position (10 times), requirements of the job description with expectations of university groups (10 times), formal preparation with length of time in position (9 times), philosophy of administration with formal preparation (9 times), and needs of the university community with expectations of university groups (9 times).

There were significant correlations between experiences gained on the job and length of time in position for all variables with the exception of state education liaison, and between needs of the university community and expectations of university groups with respect to state education liaison and general academic administration.

Simple Repeated Measures Analysis of Variance was used to assess the differences among the variables with respect to their importance to decision making relative to the functions. The summarized data revealed that there were significant differences among the variables relative to their importance to decision-making with respect to the functions.

Student-Newman-Keuls Procedure was then used to determine which variables were significantly different. These results and a comparison of means revealed that the variables were significantly more important for the following functions: fund raising (6 variables), general academic administration (5 variables), academic budgeting (5 variables), academic personnel administration (4 variables), academic program administration (4 variables), and public relations (4 variables). The three most important variables that influenced decision-making with respect to the functions are experiences gained on the job (8 functions), needs of the university community (8 functions), and philosophy of administration (7 functions).

Provosts appear to have little or no regard for the agendas or platforms of national education think tanks, formal preparation, requirements of the job description, and success in grants and endowments. The variables were generally regarded as not important for state education liaison, academic records administration, and academic freedom administration.

Data relevant to the demographic information revealed that all provosts possessed earned doctoral degrees, with the majority (60%) being in the sciences. Their specialties included chemistry, brain science, nuclear physics, botany, biology, nutrition, and engineering. There were also distributions among the humanities (29%) with concentrations in history, english, language, and literature. Formal preparation in educational areas including educational psychology and educational administration accounted for 11% of the provosts. The majority of provosts

(66%) fell within the 40-54 age range and the remaining minority (34%) were in the 55 and above age range. There were no provosts in the 25-39 age range.

Multivariate Analysis of Variance was used to measure the differences among the responses of the provosts with respect to the importance of the variables for field of study and age. The summarized data revealed that the responses of the provosts with respect to the importance of the variables did not differ regardless of their field of study and age.

Discussion

This study examined the relationships among selected variables affecting decision making in the functions of research university provosts. These were as perceived by the provosts themselves.

The results indicated that there were relationships among the nine variables with respect to each of the 11 functions. All significant correlations were positive. A significant correlation between experiences gained on the job and length of time in position is quite logical. The longer provosts remain in positions the greater their opportunities for gaining meaningful experiences. A significant correlation between formal preparation and requirements of the job description is interesting. Formal preparation courses usually mirror job descriptions. However, due to the fact that most provosts were not in education, their formal preparation was not important to decision-making within the functions.

Variables may have a high or low correlation based on the causal relationship of the intercorrelation. When one variable is low there is a tendency

for the other correlating variable to be low, and vice versa. Some variables correlate high or low across functions due to their importance or unimportance to the functions. Low means and high correlations among the variables for academic freedom administration and state liaison indicate that all provosts agreed that the variables were not important to decision-making for these functions.

There were significant differences among the variables relative to their importance to decision making for each function. Experiences gained on the job, philosophy of administration, and needs of the university community were significantly higher with respect to their importance to decision-making for all functions except fund raising and academic records administration. Most of the provosts had their formal training in the sciences (60%) and the humanities (29%) as opposed to educational administration (11%). This may suggest a reason as to why formal preparation was generally hardly important to decision-making. Provosts are expected to be sensitive, to "plunge in" and be guided by their philosophy and experience as they make decisions relative to their functions.

The importance of so many variables (6) to fund raising indicates the emphasis placed on the ability of the research university provost to secure required funds for research and development. On the other hand, academic freedom, academic records administration, and state education liaison appeared to require minimal attention and are seen as less important than other functions.

It would appear that provosts have little or no regard for the platforms and agendas of national education think tanks. They may not be aware of their job

description or may choose to ignore it. Their view of success in grants and endowments as not important except for fund raising indicates a focus of priority for the provosts.

The research university provost is part of a social system identified by various types of organizational culture. He/she does not exist in a vacuum but shares the experiences of the university community by means of identity and function. These experiences psychologically influence the philosophy of the provosts. Anderson and Carter (1978) used the concept of energy to account for the dynamic movement in a social system. This energy is inferred through its effects on the system. In terms of the research university provosts, this refers to the effects of the decision on themselves and others. The source may be an internal/external locus of control.

Insko and Schopler (1972) support the idea that numerous variables or stimuli exist in the environment and act as determinants of individual behavior through a system of allocations. Individual perceives a variable as significant or insignificant based upon their expectation of a negative or positive response. The response contributes to a balanced, homeostatic condition that acts as an indicator of balance or imbalance.

Energy and the organization of energy could then be viewed as the prime characteristics of social systems. Furthermore, all social systems are composed of energy interchange. This suggests that decision-making and its effects may be dependent upon an internal/external environment of stimuli.

This study also revealed that there were no differences among the variables with respect to the responses of the provosts for field of study and age. Research university provosts appear to be on the "cutting edge" of modern liberation management logic that views job descriptions as a series of restrictions.

This is the first study in which the developed instrument (see appendix C) was used to study the relationships among selected variables affecting decision making in the functions of research university provosts, therefore, more research is needed to confirm the results.

Conclusions

Based on the review of literature, results, and discussion the following conclusions are drawn:

1. Maturity and job experience were important factors upon which provosts relied as a means of assisting them in making tough decisions.

2. The requirements of the job description may not truly represent that which occurs on the job. Provosts are empowered people who go beyond the letter of the job to render quality service to the institution.

3. Formal preparation has little to do with decision-making, whereas, philosophy of administration stands out as a key element. Provosts are expected to "plunge in," apply their philosophy and learn by experience.

4. Provosts are required to be sensitive to the needs of the university community.

Recommendations

1. Provosts should be encouraged to take courses and/or attend workshops pertaining to the development of a sound philosophy of educational administration. Future provosts should also be granted the opportunity to "shadow" other provosts.

2. Decision-making models specifically designed for the provostship and educational administration in general should be developed and enacted. These models should cover the unique micro-factors that may be relevant to the office.

3. Research should be conducted to determine whether research I & II university provosts differ in their decision-making styles from provosts of other universities.

4. Research should be conducted to identify career paths that individuals take on their journey to the provostship.

5. Research should be conducted to determine why the variables affected decision-making in the way they did.

6. Research should be conducted to see if other variables that may be important to decision-making exist.

APPENDICES

APPENDIX A

LISTS OF RESEARCH UNIVERSITIES BY REGION

NORTH EASTERN REGION

Yale University

Harvard University

Massachusetts Institute of Technology

University of Massachusetts at Amherst

Boston University

Brandeis University

Brown University

University of Rhode Island

ATLANTIC REGION

University of Maryland at College Park

Rutgers, The State University of New Jersey at New Brunswick

Pennsylvania State University, Main Campus

University of Pittsburgh, Main Campus

John Hopkins University

Cornell University

Rockefeller University

University of Rochester

University of Pennsylvania

State University of New York at Albany

Temple University

George Washington University

Carnegie-Mellon University

Howard University

University of Delaware

Georgetown University

MID-WESTERN REGION

University of Illinois at Urbana-Champaign

University of Illinois at Chicago

University of Iowa

Michigan State University

University of Michigan at Ann Arbor

University of Minnesota at Twin Cities

University of Missouri at Columbia

Ohio State University, Main Campus

University of Wisconsin at Madison

Northwestern University

University of Chicago

Washington University

Iowa State University of Science and Technology

Kansas State University of Agriculture and Applied Sciences

University of Kansas, Main Campus

Wayne State University

University of Cincinnati, Main Campus

Southern Illinois University at Carbondale

WESTERN REGION

University of California at Berkeley

University of California at Davis

University of California at Los Angeles

University of California at Santa Barbara

University of Washington

California Institute of Technology

Stanford University

University of Southern California

Colorado State University

Oregon State University

University of Oregon, Main Campus

Washington State University

Utah State University

University of Wyoming

SOUTHERN REGION

Texas A & M University, Main Campus

Oklahoma State University, Main Campus

University of Oklahoma, Norman Campus

University of New Mexico, Main Campus

Arizona State University

SOUTH EASTERN REGION

University of Florida

University of Georgia

University of Kentucky

North Carolina State University

University of North Carolina at Chapel Hill

University of Miami

Duke University

University of South Carolina at Columbia

APPENDIX B

LETTERS ENCOURAGING PARTICIPATION

March 31, 1994

To Whom It May Concern

Mr Haldane F. Davies II is currently working on his doctoral degree in Educational Administration and Supervision at Andrews University. He is also in the process of writing his dissertation. His dissertation pertains to the relationship among selected internal/external variables affecting decision making in the roles/functions of research university provosts.

I am indeed pleased that he has taken on a study that is of paramount importance to academia. Your input in this questionnaire will be much appreciated.

Kindly assist him in this survey.

Sincerely yours,

Dr. Bernard M. Lall
Chair, Haldane Davies' Doctoral Committee

March 31, 1994

SUBJECT: Request for Cooperation in Completing Questionnaire

TO: Research University Provosts

I am a doctoral candidate in the School of Education under the Department of Educational Administration and Supervision at Andrews University. I am conducting a research study for my doctoral dissertation entitled "The Relationship Among Selected Internal/External Variables Affecting Decision Making in the Roles/Functions of Research University Provosts."

This study surveys the self perception of 94 Research 1 & 11 University Provosts. The results of the research will reveal the extent to which certain internal/external variables relate to decision making within prescribed roles/functions.

As a Research University provost, you are selected and requested to participate in this study. Your contribution to this study will be of paramount importance to research universities and the provostship in general.

May I request you to complete the questionnaire and return it to me by April 22, 1994. The questionnaire is simple and concise and should take only about ten minutes of your precious time to complete. Your input will be treated with the strictest confidence. You need not put your name.

Enclosed herewith are:

1. a letter of introduction from my advisor and committee chair
2. a two-page questionnaire
3. a stamped self addressed envelope
4. a set of first-day cover stamps from my country of origin (a token)

Thank you very much for your kind assistance. I look forward to receiving your completed questionnaire very soon.

Sincerely,

Haldane F. Davies II
Doctoral Candidate

March 31, 1994

SUBJECT: Request for Assistance in Returning Completed Questionnaire

TO: Secretary to the Provost

I am a doctoral candidate in the School of Education under the Department of Educational Administration and Supervision at Andrews University. I am conducting a research study for my doctoral dissertation and need the input of the Provost.

May I request you to ensure that the questionnaire is completed by the Provost and returned to me by April 22, 1994. Enclosed, please find a token of appreciation for a job well done. This is one of the beautiful scenes from my country of origin.

The questionnaire should arrive within the next two to three days.

Thank you for your kind help.

Sincerely,

Haldane F. Davies II
Doctoral Candidate

Ps. I really need your help.

Date: April 25, 1994

To: Secretary to the Provost

From: Haldane F. Davies II, Doctoral Candidate (0100)

Subject: Request for Cooperation in Returning Completed Questionnaire

---

On March 31, 1994, I sent you a questionnaire pertaining to Research University Provosts, with a stamped, self-addressed envelope.

I have not yet received your completed questionnaire. I would appreciate it if you could kindly spend a few minutes and ensure that the provost completes the questionnaire and return it to me as soon as possible. If you have already mailed your response, please ignore this reminder.

Thanking you for your kind assistance.

Sincerely yours,

Haldane F. Davies II
Doctoral Candidate

APPENDIX C

QUESTIONNAIRE MATERIALS

VALIDITY EVALUATION FORM

Please indicate by a check mark () below how well you think the encloses questionnaire solicits the necessary information as implicitly requested in the stated aim of the study.

1. VERY WELL _____

2. SATISFACTORY _____

3. NOT AT ALL _____

COMMENTS OR SUGGESTIONS:

_____
_____
_____
_____
_____
_____

Thank you very much.

Signature: _____
(optional)

PLEASE LIST ANY ADDITIONAL ROLES/FUNCTIONS AND/OR INTERNAL/EXTERNAL VARIABLES RELEVANT TO DECISION-MAKING IN YOUR OFFICE AS PROVOST.

ROLES/FUNCTIONS _____
_____
_____

INTERNAL/EXTERNAL VARIABLES _____
_____
_____

QUESTIONNAIRE

RESPONSE SHEET

INTERNAL/EXTERNAL VARIABLES AFFECTING DECISION MAKING IN THE ROLES/FUNCTIONS OF RESEARCH UNIVERSITY PROVOSTS

A: INDICATE YOUR RESPONSE TO EACH OF THE QUESTIONS AS FOLLOWS:

(1) INDICATE BY A CHECK-MARK ( ) THE APPROPRIATE RESPONSE ITEM AND LIST, WHERE APPLICABLE, WHAT YOU CONSIDER TO BE AT LEAST ONE OF YOUR MAJOR AND MINOR AREAS OF ACADEMIC PREPARATION ON THE CORRESPONDING BLANK

(2) EXAMPLE:

		MAJOR	MINOR
(a)	Ph. D. OR Ed. D.	EDUC. ADMIN.	HISTORY

---

(1) YOUR HIGHEST EARNED DEGREE IS AS FOLLOWS:

		MAJOR	MINOR
(A)	Ph. D. OR Ed. D	_____,	_____
(b)	Ed. S.	_____,	_____
(c)	M. A.	_____,	_____
(d)	M. Ed.	_____,	_____
(i)	OTHER_____ (Specify)	_____,	_____

(2) YOU FALL IN ONE OF THE AGE RANGES BELOW:

(a) 25-39____ (b) 40-55____ (c) Above 55____

B: AS YOU CONSIDER EACH OF THE FOLLOWING ELEVEN ROLES/FUNCTIONS LISTED ACROSS THE TOP OF THE ADJACENT PAGE, HOW IMPORTANT ARE THE NINE INTERNAL/EXTERNAL VARIABLES TO DECISION MAKING IN EACH OF THESE ELEVEN ROLES/FUNCTIONS?

PLEASE INDICATE YOUR CHOICE IN THE FOLLOWING MANNER -- AS AN EXAMPLE, IF YOU THINK THAT VARIABLE 1, PHILOSOPHY OF ADMINISTRATION, IS EXTREMELY IMPORTANT TO DECISION MAKING IN PERFORMING ROLE/FUNCTION 1, GENERAL ACADEMIC ADMINISTRATION, PLACE A (5) IN THE APPROPRIATE BOX TO INDICATE THE HIGHEST VALUE POSSIBLE.

KEY: EXTREMELY IMPORTANT = 5; IMPORTANT = 4; AVERAGE = 3; HARDLY IMPORTANT = 2; NOT IMPORTANT = 1.

PLEASE GO TO THE ADJACENT PAGE AND RECORD YOUR RESPONSES IN THE CELLS. WORK ACROSS THE PAGE FROM THE EXTREME TOP LEFTHAND CORNER TO THE EXTREME RIGHT. CONTINUE IN THIS MANNER UNTIL YOU HAVE FILLED ALL THE CELLS WITH NUMBERS OF YOUR CHOICE.

TO WHAT EXTENT DO THESE INTERNAL/EXTERNAL VARIABLES RELATE TO DECISION MAKING WITHIN THESE ROLES/FUNCTIONS?

ROLES/FUNCTIONS

INTERNAL/EXTERNAL VARIABLES	GENERAL ACADEMIC ADMINISTRATION	ACADEMIC BUDGETING	ACADEMIC PERSONNEL ADMINISTRATION	ACADEMIC PROGRAM ADMINISTRATION	ACADEMIC FREEDOM ADMINISTRATION	STUDENT RECRUITMENT ADMINISTRATION	ACADEMIC RECORDS ADMINISTRATION	ACADEMIC FACILITIES ADMINISTRATION	STATE EDUCATION LIAISON	PUBLIC RELATIONS	FUND RAISING
PHILOSOPHY OF ADMINISTRATION											
FRONAL PREPARATION											
REQUIREMENTS OF JOB DISCRIPTION											
SUCCESS IN GRANTS AND ENDOWMENTS											
EXPERIENCES GAINED ON THE JOB											
LENGTH OF TIME IN POSITION											
NEEDS OF THE UNIVERSITY COMMUNITY											
EXPECTATIONS OF UNIVERSITY GROUPS											
EXPECTATIONS OF NATIONAL EDUCATION "THINK TANKS"											

KEY: EXTREMELY IMPORTANT = 5; IMPORTANT = 4; AVERAGE = 3; HARDLY IMPORTANT = 2; NOT IMPORTANT = 1.

APPENDIX D

SHEA'S STUDY

In Shea's study, the provosts identified their areas of administrative responsibility as:

1. **Board of Trustees**

   A. Meet with Board of Trustees (as official group).
   B. Meet with committees of the Board of Trustees.
   C. Confer with individual Board members on college matters.
   D. Explain college matters to new Board members.
   E. Serve as executive officer of the Board.

2. **Administrative Staff**

   A. Meet with the chief administrative officer (president; chancellor).
   B. Meet with chief academic officer (dean).
   C. Meet with other chief fiscal officer (comptroller; vice-president for business affairs).
   D. Meet with chief student personnel officer (dean of students; vice-president for student affairs).
   E. Meet with other administrative officers.
   F. Interview prospective administrative staff.
   G. Confer with members of the administrative staff on their personal or family problems, such as finances and interpersonal relations.
   H. Reconcile differences between administrative departments or individual staff members.

3. **Teaching Staff**

   A. Meet with faculty groups to discuss their teaching responsibilities.
   B. Discuss department matters with department chairmen.
   C. Attend faculty meetings.
   D. Visit classes to observe instruction.
   E. Discuss teaching methods with individual instructors.
   F. Confer with faculty on their personal or family problems.
   G. Act to reconcile differences between academic departments or in departments or individual faculty members.
   H. Interview prospective faculty members.
   I. Decide unilaterally or in committee, faculty appointments, promotions, salaries, or terminations.

4. Curriculum

A. Confer with individual faculty or faculty groups about curriculum matters, such as specific course content or departmental requirements.
B. Conduct or participate in evaluation of major areas of curriculum, such as the general education program, vocational-technical programs, or adult education.
C. Confer with community members (other than college staff or faculty) about instituting, or changing, a specific course or courses.

5. Students

A. Teaching.
B. Give advice to individual students.
C. Act as "last court of appeal" on student disciplinary problems or serve on a committee that does.
D. Interview prospective students.
E. Hold authority for general student discipline.
F. Be actively concerned with student personnel services as Registrar's office, Admissions. Financial aid, Counseling, Dormitory management, Food services, Cultural and recreational programs, and Placement.

6. Finances

A. Personally solicit funds for the college from private individuals (non-alumni), foundation officials, business concerns, or governmental agencies.
B. Map out plans for fund-raising campaigns or activities.
C. Discuss college budgetary problems with faculty groups.
D. Consult with other members of the college administrative staff on the formulation of college budgets.
E. Handle duties usually assigned to the "comptroller" or "business manager" at other institutions.

7. Legislation

A. Speak with legislators, civil or other government officials, or their staffs, about legislation affecting educational matters, including budgets.

B. Attend meetings of legislation or governmental agencies in connection with educational matters, including budgets.
C. Hold chief responsibility for contact or liaison with legislature.

8. Public Relations and Development

A. Work on long-term building and campus plans covering several years' (or more) projects.
B. Write articles for publications of any kind.
C. Speak before groups (off campus) on education or college matters.
D. Speak to off-campus groups on other matters.
E. Personally confer with reporters, radio or TV staff, magazine representatives or writers.
F. Speak on radio or TV.
G. Confer with faculty or staff about public information programs or projects.

9. Alumni

A. Meet with alumni groups or committees.
B. Work with college staff on projects to win support from the alumni.
C. Confer with individual alumni about specific college problems.
D. Hold major responsibility for alumni relations.
E. Be involved with alumni fund-raising activities.

10. Professional Activities

A. Attend meetings of national or regional professional educational groups.
B. Attend meetings of state or local professional educational groups.
C. Attend meetings of working committees of professional educational groups.
D. Attend classes, in-service training programs, or seminars for professional development.
E. Serve as consultant to any other college, or board of directors, or organization on educational matters.

11. Civic Activities

A. Attend civic group meetings such as Lions Club, Rotary Club, Chamber of Commerce.

B. Serve on committees of civic, church, or business groups.
C. Serve as a board member or consultant in local, state, or national philanthropic, civic or cultural organizations.

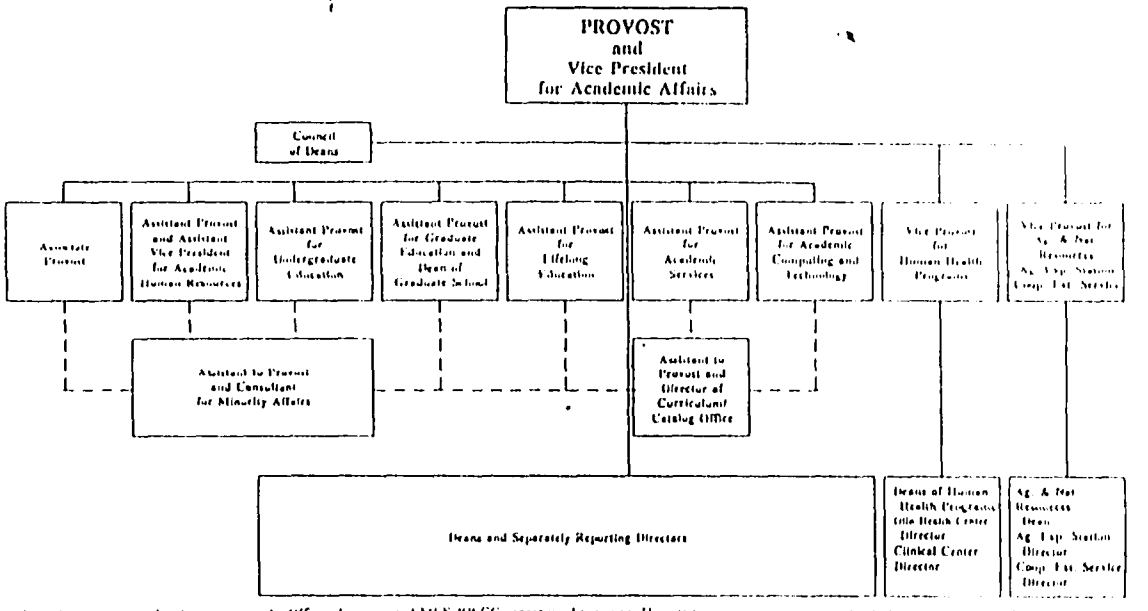
12. Buildings and Grounds

A. Inspect buildings and grounds.
B. Work on plans for major reconstruction of college buildings.
C. Confer with staff on purchasing of supplies and equipment.
D. Confer with staff on maintenance problems.
E. Speak with salesmen about supplies and equipment for the college.
F. Generally supervise plant management staff and operation.
G. Generally supervise campus security operations.

APPENDIX E

EXAMPLE ORGANIZATIONAL CHARTS

PROVOST'S OFFICE ORGANIZATIONAL CHART



The administrators under the provost in the Office of the Provost and their major areas of responsibility are outlined below:

ASSOCIATE PROVOST — Responsibilities: academic budgeting and planning, Facilities Planning and Space Management, Office of Planning and Budgets, accreditations, MSU Libraries, MSU Press, Faculty Grievance Officer and Ombudsman. Liaison to University Committee on Faculty Affairs (UCFA), assistant/associate deans and Women's Advisory Committee to the Provost (WACP).

ASSISTANT PROVOST AND ASSISTANT VICE PRESIDENT FOR ACADEMIC HUMAN RESOURCES — Responsibilities: Academic Personnel Records, Human Relations, faculty seminar programs, Martin Luther King-Rosa Parks-Cesar Chavez programs (MLK-RP-CC programs) and visiting faculty programs. Liaison to: UCFA, University Committee on Faculty Tenure, Compensation Advisory Group, WACP, Minority Advisory Council and Health Advisory Committee.

ASSISTANT PROVOST FOR UNDERGRADUATE EDUCATION — Responsibilities: Undergraduate University Division, Military Science, Aerospace Studies, Interactive Studies, Honors College, orientation and MLK-RP-CC programs. Liaison to: University Committee on General Education, University Committee on Student Affairs, Teacher Education Council, undergraduate assistant deans and Student Council.

ASSISTANT PROVOST FOR GRADUATE EDUCATION AND DEAN OF THE GRADUATE SCHOOL — Responsibilities: Graduate School, Affirmative Action Graduate Financial Aid Programs (with Urban Affairs Programs), graduate fellowships and MLK-RP-CC programs. Liaison to: University Committee on Academic Policy (UCAP), University Committee on Curriculum (UCC), University Graduate Council and graduate assistant deans.

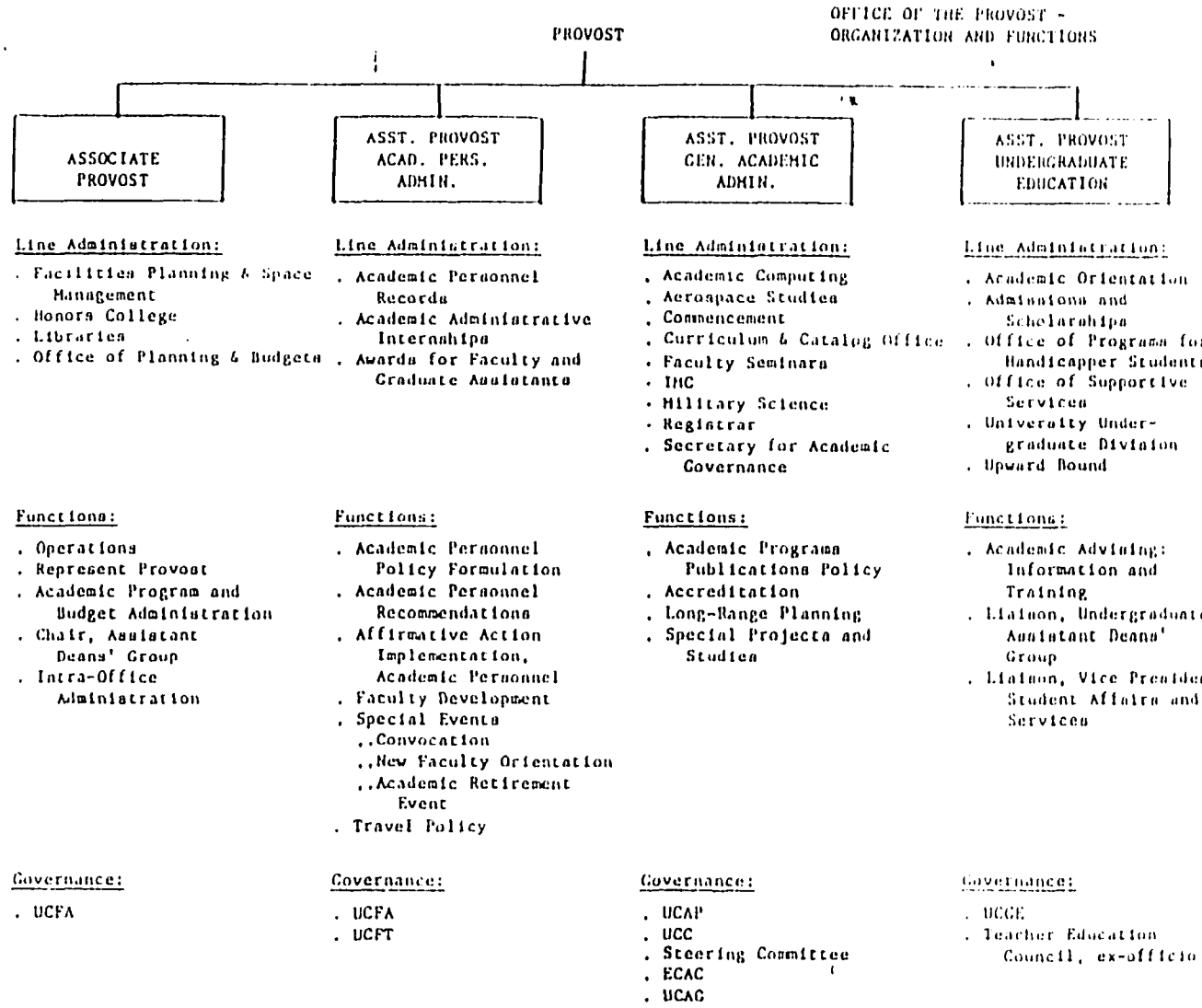
ASSISTANT PROVOST FOR LIFELONG EDUCATION — Responsibilities: Lifelong Education Exchanges, Performing Arts Facilities and Programs, Learning and Information Services (with College of Agriculture and Natural Resources (CANR)), Cooperative Ventures in Lifelong Education and Center for Practice and Policy for Lifelong Learning (with CED). Liaison to: Lifelong Education assistant deans.

ASSISTANT PROVOST FOR ACADEMIC SERVICES — Responsibilities: Office of Admissions and Scholarships, Registrar, University Curriculum and Catalog Office (headed by an assistant to the provost) [illegible] education (with the assistant provost for undergraduate education), commencement, assessment, confidential information and Secretary for Academic Governance. Liaison to: UCAP, UCC, Executive Committee of Academic Council and [illegible] assistant deans.

ASSISTANT PROVOST FOR ACADEMIC COMPUTING AND TECHNOLOGY — Responsibilities: Michigan Information Technology Network, Academic Computing, Broadcasting Services (with College of Communication Arts and Sciences), Instructional Media Center, contract officer for Student Information System and Research Excellence Funds/Networking, Analytical and Computing Information Systems. Liaison to: Communication and Computer Systems Advisory Committee.

VICE PROVOST FOR HUMAN HEALTH PROGRAMS — direct line administrator to deans of human health programs and the directors of Health Services and Facilities and the Clinical Center.

VICE PROVOST FOR AGRICULTURE AND NATURAL RESOURCES, COOPERATIVE EXTENSION SERVICE (CES) AND AGRICULTURAL EXPERIMENT STATION (AES) — direct line administrator for CANR and directors of AES and CES.



APPENDIX F

STATISTICAL RESULTS

TABLE 29

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 1, GENERAL ACADEMIC ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	168.06	8	21.01	25.31	0.00
Individuals	124.97	34	3.68	-	-
Residuals	225.72	272	.83	-	-

TABLE 30

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 2, ACADEMIC BUDGETING

Source	SS	Df	MS	F	Prob
Variables	146.29	8	18.29	20.52	0.00
Individuals	130.02	34	3.82	-	-
Residuals	242.38	272	0.89	-	-

TABLE 31

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 3, ACADEMIC PERSONNEL ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	194.97	8	24.37	27.76	0.00
Individuals	126.39	34	3.72	-	-
Residuals	238.81	272	0.88	-	-

TABLE 32

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 4, ACADEMIC PROGRAM ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	112.06	8	14.01	16.63	0.00
Individuals	139.57	34	4.11	-	-
Residuals	229.05	272	0.84	-	-

TABLE 33

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 5, ACADEMIC FREEDOM ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	139.05	8	17.38	20.10	0.00
Individuals	247.06	34	7.27	-	-
Residuals	235.17	272	0.86	-	-

TABLE 34

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 6, STUDENT RECRUITMENT ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	134.46	8	16.81	20.87	0.00
Individuals	166.84	34	4.91	-	-
Residuals	219.10	272	0.81	-	-

TABLE 35

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 7, ACADEMIC RECORDS ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	117.23	8	14.65	18.31	0.00
Individuals	116.39	34	3.42	-	-
Residuals	217.66	272	0.80	-	-

TABLE 36

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 8, ACADEMIC FACILITIES ADMINISTRATION

Source	SS	Df	MS	F	Prob
Variables	135.77	8	16.97	19.62	0.00
Individuals	119.86	34	3.53	-	-
Residuals	235.34	272	0.87	-	-

TABLE 37

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 9, STATE EDUCATION LIAISON

Source	SS	Df	MS	F	Prob
Variables	73.83	8	9.23	8.45	0.00
Individuals	339.85	34	10.00	-	-
Residuals	297.06	272	1.09	-	-

TABLE 38

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 10, PUBLIC RELATIONS

Source	SS	Df	MS	F	Prob
Variables	105.42	8	13.18	15.08	0.00
Individuals	127.22	34	3.74	-	-
Residuals	237.70	272	0.87	-	-

TABLE 39

DIFFERENCES AMONG THE VARIABLES WITH RESPECT TO FUNCTION 11, FUND RAISING

Source	SS	Df	MS	F	Prob
Variables	158.40	8	19.80	21.33	0.00
Individuals	149.40	34	4.39	-	-
Residuals	252.49	272	0.93		

TABLE 40

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 1, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	4.50	0.58
		Humanities	10	4.10	0.99
		Sciences	21	4.52	0.68
2.	Formal preparation	Ed. Related	4	3.00	0.82
		Humanities	10	2.70	1.64
		Sciences	21	2.95	1.43
3.	Job description	Ed. Related	4	3.50	0.58
		Humanities	10	3.40	1.17
		Sciences	21	2.86	1.59
4.	Grants & endowments	Ed. Related	4	3.00	0.82
		Humanities	10	2.60	1.26
		Sciences	21	3.19	1.03
5.	Job experience	Ed. Related	4	4.00	0.82
		Humanities	10	4.50	1.27
		Sciences	21	4.43	0.68
6.	Time in position	Ed. Related	4	3.25	0.96
		Humanities	10	3.80	1.23
		Sciences	21	3.76	0.77
7.	U. community needs	Ed. Related	4	3.75	0.50
		Humanities	10	3.90	1.10
		Sciences	21	4.24	0.70
8.	U. groups expectations	Ed. Related	4	4.25	0.50
		Humanities	10	4.10	0.99
		Sciences	21	3.52	0.98
9.	"Think Tanks" expectations	Ed. Related	4	2.50	1.29
		Humanities	10	1.90	1.29
		Sciences	21	2.14	1.11

$P < 0.05$

TABLE 41

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 2, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	3.75	0.96
		Humanities	10	3.40	1.43
		Sciences	21	3.90	0.83
2.	Formal preparation	Ed. Related	4	2.75	0.50
		Humanities	10	3.50	1.51
		Sciences	21	3.14	1.35
3.	Job description	Ed. Related	4	3.75	0.50
		Humanities	10	3.30	1.16
		Sciences	21	2.86	1.62
4.	Grants & endowments	Ed. Related	4	2.75	0.96
		Humanities	10	2.80	1.40
		Sciences	21	3.29	1.06
5.	Job experience	Ed. Related	4	4.50	0.58
		Humanities	10	4.30	1.25
		Sciences	21	4.38	0.59
6.	Time in position	Ed. Related	4	3.50	0.58
		Humanities	10	3.40	1.26
		Sciences	21	3.76	0.83
7.	U. community needs	Ed. Related	4	4.00	0.82
		Humanities	10	3.90	0.86
		Sciences	21	4.33	0.73
8.	U. groups expectations	Ed. Related	4	4.50	1.00
		Humanities	10	3.50	1.35
		Sciences	21	3.43	1.12
9.	"Think Tanks" expectations	Ed. Related	4	1.75	0.96
		Humanities	10	1.50	0.97
		Sciences	21	2.14	1.15

$P < 0.05$

TABLE 42

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 3, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	3.50	0.58
		Humanities	10	3.90	1.37
		Sciences	21	4.14	0.73
2.	Formal preparation	Ed. Related	4	2.25	0.96
		Humanities	10	3.10	1.37
		Sciences	21	2.81	1.44
3.	Job description	Ed. Related	4	3.25	0.50
		Humanities	10	3.30	1.16
		Sciences	21	2.95	1.50
4.	Grants & endowments	Ed. Related	4	2.50	0.58
		Humanities	10	1.40	0.84
		Sciences	21	2.48	1.29
5.	Job experience	Ed. Related	4	4.25	0.50
		Humanities	10	4.20	1.32
		Sciences	21	4.33	0.66
6.	Time in position	Ed. Related	4	3.50	1.29
		Humanities	10	3.40	1.26
		Sciences	21	3.76	0.83
7.	U. community needs	Ed. Related	4	3.75	0.96
		Humanities	10	3.90	0.99
		Sciences	21	4.05	0.80
8.	U. groups expectations	Ed. Related	4	4.25	0.50
		Humanities	10	3.50	1.08
		Sciences	21	3.29	0.90
9.	"Think Tanks" expectations	Ed. Related	4	1.50	1.00
		Humanities	10	1.80	1.32
		Sciences	21	2.00	1.22

$P < 0.05$

TABLE 43

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 4,
RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	4.00	0.82
		Humanities	10	3.60	1.07
		Sciences	21	4.33	0.58
2.	Formal preparation	Ed. Related	4	3.00	1.41
		Humanities	10	3.20	1.48
		Sciences	21	3.29	1.59
3.	Job description	Ed. Related	4	3.50	0.58
		Humanities	10	3.10	1.29
		Sciences	21	3.00	1.55
4.	Grants & endowments	Ed. Related	4	3.50	0.58
		Humanities	10	2.80	1.23
		Sciences	21	3.10	1.04
5.	Job experience	Ed. Related	4	4.00	0.00
		Humanities	10	4.20	1.23
		Sciences	21	3.95	0.92
6.	Time in position	Ed. Related	4	3.00	0.82
		Humanities	10	3.60	1.07
		Sciences	21	3.48	0.87
7.	U. community needs	Ed. Related	4	4.25	0.50
		Humanities	10	4.00	0.82
		Sciences	21	4.10	0.89
8.	U. groups expectations	Ed. Related	4	4.00	0.00
		Humanities	10	3.80	1.14
		Sciences	21	3.43	1.03
9.	"Think Tanks" expectations	Ed. Related	4	2.00	1.15
		Humanities	10	1.60	0.97
		Sciences	21	2.43	1.29

$P < 0.05$

TABLE 44

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 5, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	4.25	0.96
		Humanities	10	4.20	0.92
		Sciences	21	3.95	1.28
2.	Formal preparation	Ed. Related	4	2.75	0.96
		Humanities	10	2.60	1.43
		Sciences	21	2.33	1.35
3.	Job description	Ed. Related	4	3.25	0.96
		Humanities	10	2.50	0.85
		Sciences	21	2.14	1.39
4.	Grants & endowments	Ed. Related	4	3.00	0.82
		Humanities	10	1.40	0.70
		Sciences	21	1.90	1.18
5.	Job experience	Ed. Related	4	3.75	0.50
		Humanities	10	3.30	1.42
		Sciences	21	3.10	1.41
6.	Time in position	Ed. Related	4	3.00	1.63
		Humanities	10	2.90	1.29
		Sciences	21	2.81	1.29
7.	U. community expectations	Ed. Related	4	3.75	0.50
		Humanities	10	3.50	1.18
		Sciences	21	3.14	1.39
8.	U. groups expectations	Ed. Related	4	3.75	0.50
		Humanities	10	3.70	1.42
		Sciences	21	3.19	1.44
9.	"Think Tanks" expectations	Ed. Related	4	2.25	1.50
		Humanities	10	2.00	1.33
		Sciences	21	2.14	1.24

$P < 0.05$

TABLE 45

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 6,
RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	3.50	0.58
		Humanities	10	3.30	1.16
		Sciences	21	3.24	1.18
2.	Formal preparation	Ed. Related	4	2.50	0.58
		Humanities	10	2.50	1.27
		Sciences	21	2.52	1.40
3.	Job description	Ed. Related	4	3.00	0.82
		Humanities	10	3.20	1.23
		Sciences	21	2.48	1.17
4.	Grants & endowments	Ed. Related	4	2.50	1.00
		Humanities	10	1.50	0.71
		Sciences	21	1.95	1.16
5.	Job experience	Ed. Related	4	4.00	0.82
		Humanities	10	3.70	1.25
		Sciences	21	3.48	1.17
6.	Time in position	Ed. Related	4	3.25	0.50
		Humanities	10	3.00	1.54
		Sciences	21	2.95	1.20
7.	U. community needs	Ed. Related	4	3.75	0.50
		Humanities	10	3.80	0.79
		Sciences	21	3.67	1.24
8.	U. groups expectations	Ed. Related	4	4.00	0.00
		Humanities	10	3.50	1.08
		Sciences	21	3.00	1.26
9.	"Think Tanks" expectations	Ed. Related	4	2.00	1.41
		Humanities	10	1.60	0.97
		Sciences	21	1.86	1.01

$P < 0.05$

TABLE 46

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 7, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	2.50	0.58
		Humanities	10	2.40	0.97
		Sciences	21	3.00	0.95
2.	Formal preparation	Ed. Related	4	2.00	0.82
		Humanities	10	2.90	1.45
		Sciences	21	3.00	0.95
3.	Job description	Ed. Related	4	3.00	0.82
		Humanities	10	2.80	1.03
		Sciences	21	2.19	1.21
4.	Grants & endowments	Ed. Related	4	2.00	1.54
		Humanities	10	1.50	0.85
		Sciences	21	1.81	0.98
5.	Job experience	Ed. Related	4	3.75	1.26
		Humanities	10	3.50	1.27
		Sciences	21	3.29	1.19
6.	Time in position	Ed. Related	4	3.00	0.82
		Humanities	10	2.90	1.29
		Sciences	21	2.96	1.02
7.	U. community groups	Ed. Related	4	3.50	0.58
		Humanities	10	3.30	0.95
		Sciences	21	3.05	0.97
8.	U. groups expectations	Ed. Related	4	3.50	0.58
		Humanities	10	3.00	1.25
		Sciences	21	2.52	0.98
9.	"Think Tanks" expectations	Ed. Related	4	1.50	0.58
		Humanities	10	1.20	0.63
		Sciences	21	1.48	0.87

$P < 0.05$

TABLE 47

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 8,
RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	2.50	0.58
		Humanities	10	2.80	1.23
		Sciences	21	3.05	0.86
2.	Formal preparation	Ed. Related	4	1.75	0.96
		Humanities	10	3.10	1.45
		Sciences	21	2.67	1.46
3.	Job description	Ed. Related	4	3.00	0.82
		Humanities	10	2.90	0.99
		Sciences	21	2.38	1.24
4.	Grants & endowments	Ed. Related	4	2.50	1.00
		Humanities	10	2.70	1.49
		Sciences	21	2.76	0.94
5.	Job experience	Ed. Related	4	3.75	1.26
		Humanities	10	3.50	1.27
		Sciences	21	3.76	0.89
6.	Time in position	Ed. Related	4	3.00	0.82
		Humanities	10	3.10	1.20
		Sciences	21	3.10	1.00
7.	U. community needs	Ed. Related	4	3.50	0.58
		Humanities	10	3.60	0.97
		Sciences	21	3.95	0.86
8.	U. groups expectations	Ed. Related	4	3.75	0.96
		Humanities	10	3.50	1.18
		Sciences	21	3.43	1.16
9.	"Think Tanks" expectations	Ed. Related	4	1.00	0.00
		Humanities	10	1.40	0.97
		Sciences	21	1.67	1.02

$P < 0.05$

TABLE 48

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 9, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	3.5	1.29
		Humanities	10	2.20	1.62
		Sciences	21	3.10	1.51
2.	Formal preparation	Ed. Related	4	2.25	1.50
		Humanities	10	1.90	1.73
		Sciences	21	2.10	1.37
3.	Job description	Ed. Related	4	2.75	0.96
		Humanities	10	2.10	1.45
		Sciences	21	2.00	1.41
4.	Grants & endowments	Ed. Related	4	2.50	1.29
		Humanities	10	1.90	1.52
		Sciences	21	1.81	1.21
5.	Job experience	Ed. Related	4	4.00	1.41
		Humanities	10	2.60	1.96
		Sciences	21	3.14	1.59
6.	Time in position	Ed. Related	4	3.25	0.50
		Humanities	10	3.00	1.54
		Sciences	21	2.95	1.20
7.	U. community needs	Ed. Related	4	2.50	0.58
		Humanities	10	2.90	1.79
		Sciences	21	2.95	1.50
8.	U. groups expectations	Ed. Related	4	3.50	0.58
		Humanities	10	3.10	1.85
		Sciences	21	2.24	1.41
9.	"Think Tanks" expectations	Ed. Related	4	2.00	1.54
		Humanities	10	1.50	1.51
		Sciences	21	2.00	1.45

$P < 0.05$

TABLE 49

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 10, RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	3.25	0.50
		Humanities	10	3.50	1.18
		Sciences	21	3.71	1.01
2.	Formal preparation	Ed. Related	4	2.50	0.58
		Humanities	10	2.60	1.43
		Sciences	21	2.67	1.28
3.	Job description	Ed. Related	4	3.25	0.50
		Humanities	10	3.00	1.54
		Sciences	21	2.52	1.29
4.	Grants & endowments	Ed. Related	4	2.25	0.96
		Humanities	10	2.30	1.06
		Sciences	21	2.71	1.19
5.	Job experience	Ed. Related	4	3.50	0.58
		Humanities	10	3.60	1.51
		Sciences	21	4.00	0.84
6.	Time in position	Ed. Related	4	3.25	0.50
		Humanities	10	3.00	1.33
		Sciences	21	3.19	1.08
7.	U. community needs	Ed. Related	4	4.25	0.50
		Humanities	10	4.00	0.94
		Sciences	21	3.62	0.86
8.	U. groups expectations	Ed. Related	4	3.50	0.58
		Humanities	10	3.80	1.03
		Sciences	21	3.24	1.04
9.	"Think Tanks" expectations	Ed. Related	4	1.75	0.96
		Humanities	10	1.90	1.29
		Sciences	21	2.29	1.23

$P < 0.05$

TABLE 50

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 11,
RELATIVE TO PROVOSTS FIELD OF STUDY

		Field	N	Mean	Std Dev
1.	Philosophy of administration	Ed. Related	4	3.00	1.63
		Humanities	10	3.50	1.35
		Sciences	21	3.62	1.20
2.	Formal preparation	Ed. Related	4	2.50	0.58
		Humanities	10	2.50	1.58
		Sciences	21	2.71	1.27
3.	Job description	Ed. Related	4	3.50	1.00
		Humanities	10	3.10	1.20
		Sciences	21	2.67	1.35
4.	Grants & endowments	Ed. Related	4	4.00	1.41
		Humanities	10	3.90	1.29
		Sciences	21	4.19	0.98
5.	Job experience	Ed. Related	4	4.25	0.96
		Humanities	10	3.90	1.20
		Sciences	21	4.24	0.70
6.	Time in position	Ed. Related	4	3.50	0.58
		Humanities	10	3.40	1.17
		Sciences	21	3.57	0.93
7.	U. community needs	Ed. Related	4	3.25	2.22
		Humanities	10	4.10	0.88
		Sciences	21	4.19	0.81
8.	U. groups expectations	Ed. Related	4	3.75	0.96
		Humanities	10	4.00	1.05
		Sciences	21	3.48	1.17
9.	"Think Tanks" expectations	Ed. Related	4	1.50	0.58
		Humanities	10	1.70	1.49
		Sciences	21	2.14	1.31

$P < 0.05$

TABLE 51

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 1, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of Administration	40 - 55	23	4.22	0.85
		55+	12	4.75	0.45
2.	Formal Preparation	40 - 55	23	2.78	1.59
		55+	12	3.08	1.00
3.	Job Description	40 - 55	23	3.17	1.47
		55+	12	2.92	1.31
4.	Grants & Endowments	40 - 55	23	3.07	1.20
		55+	12	2.83	0.83
5.	Job Experience	40 - 55	23	4.22	1.00
		55+	12	4.75	0.45
6.	Time in Position	40 - 55	23	3.61	1.08
		55+	12	3.92	0.51
7.	U. Community Needs	40 - 55	23	4.09	0.85
		55+	12	4.08	0.79
8.	U. Groups Expectations	40 - 55	23	3.91	0.73
		55+	12	3.50	1.31
9.	"Think Tanks" Expectations	40 - 55	23	2.17	1.30
		55+	12	2.00	0.85

$P < 0.01$

TABLE 52

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 2, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	3.57	1.12
		55+	12	4.08	0.79
2.	Formal preparation	40 - 55	23	3.13	1.49
		55+	12	3.33	0.98
3.	Job description	40 - 55	23	3.07	1.53
		55+	12	3.08	1.24
4.	Grants & endowments	40 - 55	23	3.09	1.16
		55+	12	3.08	1.16
5.	Job experience	40 - 55	23	4.26	0.92
		55+	12	4.59	0.51
6.	Time in position	40 - 55	23	3.61	1.03
		55+	12	3.67	0.78
7.	U. community needs	40 - 55	23	4.17	0.78
		55+	12	4.17	0.83
8.	U. groups expectations	40 - 55	23	3.70	1.02
		55+	12	3.33	1.50
9.	"Think Tanks" expectations	40 - 55	23	1.96	1.15
		55+	12	1.83	1.03

$P < 0.01$

TABLE 53

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 3, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 -55	23	3.87	1.01
		55+	12	4.25	0.75
2.	Formal preparation	40 - 55	23	2.57	1.41
		55+	12	3.33	1.15
3.	Job description	40 - 55	23	3.00	1.28
		55+	12	3.25	1.42
4.	Grants & endowments	40 - 55	23	2.13	1.36
		55+	12	2.25	0.87
5.	Job experience	40 - 55	23	4.17	0.94
		55+	12	4.50	0.67
6.	Time in position	40 - 55	23	3.61	1.03
		55+	12	3.67	0.98
7.	U. community needs	40 - 55	23	3.96	0.82
		55+	12	4.00	0.95
8.	U. groups expectations	40 - 55	23	3.48	0.67
		55+	12	3.42	1.38
9.	"Think Tanks" expectations	40 - 55	23	1.91	1.28
		55+	12	1.83	1.11

$P < 0.01$

TABLE 54

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 4, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	4.00	0.90
		55+	12	4.25	0.62
2.	Formal preparation	40 - 55	23	3.13	1.63
		55+	12	3.42	1.24
3.	Job description	40 - 55	23	3.13	1.45
		55+	12	3.00	1.28
4.	Grants & endowments	40 - 55	23	3.09	1.12
		55+	12	3.00	0.95
5.	Job experience	40 - 55	23	3.91	0.95
		55+	12	4.25	0.97
6.	Time in position	40 - 55	23	3.39	0.99
		55+	12	3.58	0.79
7.	U. community needs	40 - 55	23	4.13	0.69
		55+	12	4.00	1.04
8.	U. groups expectations	40 - 55	23	3.70	0.76
		55+	12	3.42	1.38
9.	"Think Tanks" expectations	40 - 55	23	2.35	1.30
		55+	12	1.75	0.97

$P < 0.05$

TABLE 55

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 5, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	4.00	0.90
		55+	12	4.17	1.53
2.	Formal preparation	40 - 55	23	2.43	1.47
		55+	12	2.50	1.00
3.	Job Description	40 - 55	23	2.52	1.31
		55+	12	2.08	1.08
4.	Grants & endowments	40 - 55	23	2.00	1.13
		55+	12	1.67	1.07
5.	Job experience	40 - 55	23	3.17	1.15
		55+	12	3.33	1.67
6.	Time in position	40 - 55	23	2.83	1.15
		55+	12	2.92	1.56
7.	U. community needs	40 - 55	23	3.30	1.11
		55+	12	3.33	1.56
8.	U. groups expectations	40 - 55	23	3.61	1.03
		55+	12	3.00	1.81
9.	"Think Tanks" expectations	40 - 55	23	2.26	1.36
		55+	12	1.83	1.03

$P < 0.05$

TABLE 56

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 6, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	3.35	0.93
		55+	12	3.17	1.40
2.	Formal preparation	40 - 55	23	2.52	1.31
		55+	12	2.50	1.24
3.	Job description	40 - 55	23	2.78	1.16
		55+	12	2.67	1.23
4.	Grants & endowments	40 - 55	23	2.04	1.11
		55+	12	1.58	0.90
5.	Job experience	40 - 55	23	3.65	1.03
		55+	12	3.50	1.38
6.	Time in position	40 - 55	23	3.04	0.98
		55+	12	2.92	1.38
7.	U. community needs	40 - 55	23	3.91	0.85
		55+	12	3.33	1.30
8.	U. groups expectations	40 - 55	23	3.48	0.85
		55+	12	2.83	1.59
9.	"Think Tanks" expectations	40 - 55	23	1.91	1.04
		55+	12	1.58	1.00

$P < 0.05$

TABLE 57

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 7, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	2.70	0.97
		55+	12	2.92	0.90
2.	Formal preparation	40 - 55	23	2.35	1.37
		55+	12	2.67	1.07
3.	Job description	40 - 55	23	2.52	1.24
		55+	12	2.33	0.98
4.	Grants & endowments	40 - 55	23	1.87	1.01
		55+	12	1.50	0.80
5.	Job experience	40 - 55	23	3.35	1.07
		55+	12	3.50	1.45
6.	Time in position	40 - 55	23	2.96	1.07
		55+	12	2.92	1.08
7.	U. community needs	40 - 55	23	3.13	0.87
		55+	12	3.25	1.06
8.	U. groups expectations	40 - 55	23	2.74	0.96
		55+	12	2.83	1.27
9.	"Think Tanks" expectations	40 - 55	23	1.57	0.90
		55+	12	1.08	0.29

$P < 0.05$

TABLE 58

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 8, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	2.74	0.86
		55+	12	3.25	1.06
2.	Formal preparation	40 - 55	23	2.61	1.53
		55+	12	2.83	1.27
3.	Job description	40 - 55	23	2.74	1.18
		55+	12	2.33	1.07
4.	Grants & endowments	40 - 55	23	2.87	1.14
		55+	12	2.42	1.00
5.	Job experience	40 - 55	23	3.70	1.02
		55+	12	3.67	1.07
6.	Time in position	40 - 55	23	3.17	1.03
		55+	12	2.92	1.00
7.	U. community needs	40 - 55	23	3.87	0.81
		55+	12	3.67	0.98
8.	U. groups expectations	40 - 55	23	3.65	0.98
		55+	12	3.17	1.34
9.	"Think Tanks" expectations	40 - 55	23	1.74	1.10
		55+	12	1.08	0.29

$P < 0.05$

TABLE 59

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 9, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	2.83	1.53
		55+	12	3.00	1.65
2.	Formal preparation	40 - 55	23	2.00	1.57
		55+	12	2.17	1.27
3.	Job description	40 - 55	23	2.26	1.51
		55+	12	1.83	1.03
4.	Grants & endowments	40 - 55	23	2.04	1.33
		55+	12	1.67	1.23
5.	Job experience	40 - 55	23	3.30	1.69
		55+	12	2.67	1.67
6.	Time in position	40 - 55	23	3.04	0.98
		55+	12	2.92	1.38
7.	U. community needs	40 - 55	23	3.00	1.57
		55+	12	3.00	1.41
8.	U. groups expectations	40 - 55	23	2.74	1.51
		55+	12	2.42	1.62
9.	"Think Tanks" expectations	40 - 55	23	2.04	1.58
		55+	12	1.50	1.00

$P < 0.05$

TABLE 60

IMPORTANCE OF VARIABLES WITH RESPECT TO
FUNCTION 10, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	3.52	1.04
		55+	12	3.75	0.97
2.	Formal preparation	40 - 55	23	2.61	1.44
		55+	12	2.67	0.78
3.	Job description	40 - 55	23	2.87	1.25
		55+	12	2.50	1.09
4.	Grants & endowments	40 - 55	23	2.70	1.15
		55+	12	2.25	1.06
5.	Job experience	40 - 55	23	4.00	0.95
		55+	12	3.50	1.17
6.	Time in position	40 - 55	23	3.22	1.13
		55+	12	3.00	1.04
7.	U. community needs	40 - 55	23	3.78	0.85
		55+	12	3.83	0.94
8.	U. groups expectations	40 - 55	23	3.61	0.78
		55+	12	3.08	1.31
9.	"Think Tanks" expectations	40 - 55	23	2.26	1.36
		55+	12	1.83	0.83

$P < 0.05$

TABLE 61

IMPORTANCE OF VARIABLES WITH RESPECT TO FUNCTION 11, RELATIVE TO PROVOSTS AGE

		Age	N	Mean	Std Dev
1.	Philosophy of administration	40 - 55	23	3.35	1.30
		55+	12	3.83	1.19
2.	Formal preparation	40 - 55	23	3.15	1.09
		55+	12	2.42	0.79
3.	Job description	40 - 55	23	3.18	1.14
		55+	12	2.58	1.24
4.	Grants & endowments	40 - 55	23	4.26	0.96
		55+	12	3.75	1.29
5.	Job experience	40 - 55	23	4.26	0.92
		55+	12	3.92	0.79
6.	Time in position	40 - 55	23	3.57	1.04
		55+	12	3.42	0.79
7.	U. community needs	40 - 55	23	4.09	0.81
		55+	12	4.33	0.78
8.	U. groups expectations	40 - 55	23	3.61	0.89
		55+	12	4.09	0.94
9.	"Think Tanks" expectations	40 - 55	23	2.00	1.45
		55+	12	1.83	1.03

$P < 0.05$

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